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"AUTHORITY!" WHY NOT KNOW?

IN the early chapters of *Wilhelm Meister* Goethe describes his hero, ascribing to him the sentiments of a man of his age, at the beginning of manhood. After some years he brings him back, and most artistically illustrates his development by contrasting him with his brother-in-law, who has practically stood still these years. Sometimes we fail to realize the alterations time and experience have wrought in our own mental attitude until something occurs to bring us up beside our former views.

A correspondent asked us our "authority" for certain statements concerning the applicability of a remedy to certain morbid conditions. The request impressed us as singular. Why should anyone have to have authority for a therapeutic measure? Are not our own eyes, ears, and the brain behind them the best and only authority a man can have? We give a medicine because we see a certain pathologic disorder present, and we know that this aberration from the normal standard is removable by that remedy. We continue giving it until the normal equilibrium has been restored, and the patient is well. Then—along comes some one and asks what is our "authority" for giving that remedy!

In trying to realize the significance of such a question we have to revert to the earlier phases of our professional life. Then we

gave a remedy because our preceptors, or text-books, or a respected colleague, advised it. On the strength of their advice we "tried" the drug, and if the patient recovered we reported a therapeutic success and continued to use that prescription until it failed or a higher authority loomed up. Did we ever know if the remedy had anything to do with the result? Did we ever know why that remedy should be advised there? Did we ever know what effects would be manifested by it, and what indications should guide us in continuing, modifying or ceasing its use? Never. Every therapeutic move we made was an experiment, and our only light gained by it was the sequence.

Attending a child with catarrhal pneumonia, we had gradually added to our medicine every "expectorant" we knew, ipecac, squill, senega, tolu, paregoric, sanguinaria, ammonium chloride, licorice, and prunus Virginiana. Still the child refused to improve, and we called in a consultant. He looked over our prescription, considered, smiled sardonically, and—*added antimony*, with the injunction that we "try that." As the child quickly improved we made that the basis of our treatment for some years thereafter. Yet, we did not seem to be any more stupid or ignorant than the rest of the men with whom we came into professional

contact. They, like ourselves, were accustomed to yield to the dicta of "authority."

The perfect openness of active-principle medication is a matter of course to the user, an impenetrable obscurity to the rest. There is and can be but one authority to any real physician in the use of drugs and that is himself. He studies the action of a drug, sees its applicability to the condition present, and administering the remedy sees its action manifested and stops it when that action has gone as far as he desires. What folly to talk to him about authority for his application of drugs. What earthly difference does it make to him that Nothnagel said the drug would not do this, when he sees for himself that it is doing it. Why should he care that Cushny talks of aconitine being unsafe, when he himself has given hundreds and thousands of doses, watched their effect and knows his drug as he knows the lines with which he controls his high-stepping horse. What if Wood does say veratrine is not as good as veratrum viride, when he himself has used both and knows perfectly the difference, and can choose the delicate certainty for cases requiring such delicate certainty?

The radical distinction to be noted between this alkaloidal movement and ordinary advocacy of remedial procedures is that whereas they depend on the authority of someone and ask the physician to accept the advocated procedures on faith, we simply ask the physician to himself act as judge and jury, and to take nothing we say on faith. Apply known remedial agents to known pathologic conditions and there is no room for chance—the results are as unerring as the multiplication table.

CONSISTENCY, THOU ART "A PEACH."

It does seem a trifle inconsistent for the journals to be berating the patents and other

The field of remedial action has been so widely enlarged as to include many things not dreamed of by Hahnemann's philosophy.—Leonard.

nostrums for cultivating the alcohol habit on the one hand, and decrying alkaloids and advocating the use of the old-fashioned tinctures and elixirs on the other. Does no one stop to think that these alcoholic beverages with a trace of medicine thrown in have as much to do with arousing the craving for stimulants as the cruder and far less seductive St.—1860—X? Why kick at peruna and then prescribe wine of calisaya? Verily, this is a funny world.

A POSITIVE PROOF OF THE VARIABILITY, HENCE UNRELIABILITY OF THE GALENICS.

In the February number of this journal, page 154, we published (with brief comment) the table which follows and we reproduce it here with further comment not only for the especial benefit of some 10,000 wide-awake doctors who have since subscribed, but that it may be even more forcefully impressed upon our readers as a whole.

The author from whom we republish the table says:

It may be of interest to pharmacists and physicians to note how our most largely-used drugs have varied during the past seven years, and to draw from these statistics some conclusions as to the desirability, if not necessity, of adopting standards for drugs in our Pharmacopeia.

In past years we accepted good-looking, healthy specimens of drugs as satisfactory and never bothered our minds as to their relative strength in active principles. When we consider that drugs are essential to our health and often to our life, and often the question of a poor drug, or a good one, means life or death to our patient, it should bring home to us the necessity of standardizing our drugs. . . .

From a long experience with the assay and study of drugs, I have gathered some few facts which I will present below to show

Why has not our school in nearly 100 years given to similia a fixed place in scientific medicine?—Leonard, *Clin. Reporter*.

how nature does not by any means always produce for our use drugs of uniform or good quality:

DRUGS.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.
Digitalis	0.288	0.280	0.25	0.275	0.23	0.3	0.3
Hyscynamus	....	....	....	0.12	0.14	0.09	0.15
Belladonna	1.0.42	0.42	0.40	0.44	0.46	0.46	0.455
Belladonna rt.	....	0.63	0.68	0.5	0.59	0.56	0.54
Ipecac, Rio	2.6	2.6	2.3	2.4	2.7	2.00	2.2
				2.4			
Ipecac, Carth-							
gena	2.77	2.88	2.86	2.90	2.24	2.3	2.3
Hydrastis	2.28	2.8 F.	3.1	3.1	3.2	3.3	3.3
		Spr.	3.6	3.2	3.3		
Ergot	0.24	0.24	0.20	0.20	0.25	0.32	0.12
Strophanthus	2.70	2.45	2.1	2.2	2.3	3.0	3.0
Kombe							
Strophanthus	3.30	2.66		3.18	3.60		
Hispidus							
Nux Vomica	2.3	2.5	2.6	2.65	2.0	2.2	2.40
Aconite Rt	0.55	0.62		0.92	.53	0.75	0.75
Pomegranate							
Bk	0.6	0.7	0.62	0.50	0.48		
Jaborandi	0.19	0.23	0.72	0.28	1.1	1.2	1.2
Guarana	....	....	3.85	3.75	4.02	4.18	4.00
Cinchona ether sol. alk.			7.1	5.8	6.8	6.4	6.2
Cinchona red ttl. alk.			6.85	6.2	6.05	6.3	6.2
Cocoa	0.65	0.78	0.80	0.72	1.	1.02	0.98
Colchicum							
Seed	....	....	0.56	0.54	0.6	0.6	0.53
Jalap	11.21	10.1	8.6	8.4	7.1	6.7	6.2

These figures are in each case the average of assays of many samples of drugs made during the entire year and vary from five to fifty.

The above table (extracted from a plea for standardization of drugs by A. R. L. Dohme, Ph. D., the well-known chemist of Baltimore, one of the ablest and truest men in legitimate pharmacy, and which appeared in a recent issue of *The Apothecary*), should be posted in every physician's office, immediately over his dispensing table or drug shelves, or in the cover of his prescription book, whatever his style of practice may be. A glance at it will serve to explain why at certain times cases refuse to yield to measures which have hitherto proved effective. The figure will carry a conviction that the most carefully thought-out and compounded galenic prescription is, after all, an unknown quantity; something which may allay pain in August and produce emesis in May!

The formula which has been tested and tried on animals and humans with the idea of fixing the maximum dose (say of a digi-

Thorough and carefully scientific elimination of deadwood is the main and crying need of our special therapeutics today.—Leonard.

talis preparation) may call for ten drops in 1899 or 1900; but what would be the use of such a dosage if the preparation was made without assay from 1905 digitalis? And, vice versa: A fluid extract (from a shipment of jaborandi, say) proves efficient in doses of gtt. 20. Suppose you give that dose of a fluid extract from the 1905 supply? You are likely to conclude that your treatment has hitherto been wrong—and drop pilocarpus as "unsafe and unreliable!"

Few physicians are familiar with the fact that Carthagena ipecac root is always richer in cephaeline than the Rio variety, thus he cannot understand why some of his formulas calling for fair doses of ipecac in some form cause vomiting, while others seem inert. He may not understand fully, either, that emetine (present more largely in Rio ipecac) is the expectorant and most generally useful principle, while cephaeline (which predominates in Carthagena ipecac) is purely emetic and irritant; therefore to be avoided except as an emetic, for which other things (apomorphine, for example) are to be preferred.

This table given also shows that of late years the alkaloidal yield of crude drugs has increased; thus, the effective dose of five years ago is in most cases too heavy. But as every shipment of vegetable drugs varies in active-principle content; and as every year quantities of exhausted, hence inert and bogus drugs (both fraudulent) are thrown upon the market, despite every precaution finding their way on to the shelves of the retailer and especially into the stocks of the just-as-good-and-cheaper manufacturing pharmacists, it is evident that the only way to be sure of the therapeutic action of any given dose of most if not all vegetable remedies is to use the alkaloids themselves; and as individual tolerance varies (the same person even being susceptible to a smaller, or perhaps only to a larger dose under certain physical condi-

The law defining taxable property as that running and abutting on the highway, Bryan's goat was included.

tions) we should exhibit the small dose at regular (proper) intervals "to effect."

Standardization is well enough, and for the manufacturer of galenicals is absolutely essential; there are cases in which the fluid extract must be used—or, at least, proves most convenient—but if we would make medicine even approximately a positive science we will use, wherever and whenever we can, the right dose of the known active principle, leaving the fluid and other galenic preparations (even when "standardized") to be utilized only where the active principle is not obtainable or where positive action and absolute precision are not so essential.

Moreover, it should always be remembered that the most perfect standardized fluid extract is liable to change; heat, cold, time, exposure, all these and other influences bring about differences in the original preparation; hence it is impossible to say that ten minimis taken from a pound bottle opened on January 1st will produce a similar physiological effect thirty days (or five years) later. The *alkalooids* do not change; one-hundredth of a grain will do a certain thing when exhibited under certain similar conditions at any time. Doses do not need to be revised; there is no need to say, "I hope that the medication will act in this case as it did in the one I gave it to last year." *It will!* All you have to do is order the smallest known-to-be-effective dose every half hour or so and wait for the exact physiological action you desire to obtain.

If you're going to "practise medicine," Doctor, to practise *real medicine* and be as precise about your medication as the chemist is about his formulas, which you certainly should be, your course is plain. In fact, it is even more essential that you should know your agents are right; for while you are really both doing the same thing, *you* must do your work in the hidden laboratory of the

In progressive active-principle therapy we have means of saving life unapproachable otherwise save by electricity.—Gray.

human body while he can always see what results follow certain combinations of substances; moreover, the chemist can always rectify mistakes and repeat experiments with new and better material while your experience may be that a single mistake will remove laboratory and all. With uncertain remedies you *must* make mistakes; with positive therapeutic agents you cannot reasonably do so.

Uncertainty of tool leads to uncertainty in work; uncertainty in means and methods make the nihilist, the medical procrastinator and scoffer, whose "throw physic to the dogs" (who can blame him), or whose "if nature fails, and the surgeon can't cut it out we'll hold a post mortem to verify diagnosis," as a state of mind, is, next to the uncertainty that is responsible for it, one of the greatest hindrances to medical progress.

There is one solution to the question. The thought is before you; the trail is blazed; it is for you to beat the path, to subdue the forest of querulous criticism and to build the citadel of success. The general adoption and use of the active principle is the only solution of all this jangle and in time this will unquestionably result and thus will our contention for all these many years be vindicated.

With the constant change of percentage of active-principle content that is conceded, if the directions for making galenicals are right this year, how are they next or how may they be ten years hence? Standardization is the only solution of the question, but that is a long tedious process which few houses will undertake, mighty few will live up to except in printed literature—and then what's the use? It's all based on active-principle content anyway. "Absurd," you say. Of course it is, utterly so. And then, where does the retail pharmacist come in? He can't buy assayed drugs, for if he does

The State Board renews its warning against dependence on copper for the purification of drinking water.

they are not the same when he gets them as they were when assayed, and not the same in a month after the package was opened to use part, as they were when he bought them. Is he going to buy all his galenical preparations from a house that claims to standardize, or is he going to go on making up all he can as best he can from the rules given him and the drugs sold him? Is he going to change all his stock when "magister divit?" The doctor don't stop and think long enough to care.

We shall have some interesting work on this subject in next month's *CLINICAL MEDICINE*.

WELL, WHO CARES!

The day of quack medicine with all its effrontery is done. A leading advertising agent, who has been in the business for many years, one who stands high in his profession, said to a friend of the writers that it cost ten times as much today to get a reply from medical advertising to the laity as it did a few years ago, and then when they came it was still harder to work anything out of them. In fact, he said: "This medical business to the laity has not only seen its best days but it is done, dead, ready to be buried," and we say, Good! *Requiescat!!* and with a glad hand and willing hammer stand ready to help the doctor drive the last nail in its coffin.

Let the doctor stop quibbling and really get to work! Let him know what to do and do it. Let him protect himself in his practice as he should and then that which is above foretold will come to pass of very truth.

AMONG THE EXCHANGES.

It is getting a real labor to go over the exchanges, but truly a labor of love, because

Bacteria in water can not be destroyed by adding mineral poisons, leaving the water fit for use.—Ill. State Board Bulletin.

we find so many things in them too good to be overlooked. We would like to repeat for you the best of the lot, but space forbids; and besides, we have urged on you the duty of subscribing to your home journals as well as for our own. We will pass by the articles treating of surgical technic, of the indirect therapeutic methods, of the newer purely experimental methods, and those dealing with theoretic and speculative matters—the former are in no particular danger of being overlooked just now, and the rest are too unsettled to be received as safe guides at present. In the *Denver Medical Times* of last August was a 24-page paper by Edward C. Hill, on "The Physics and Chemistry of Drug Action," that even at this late day is too valuable to be omitted. We may take a lot of footnotes from it to give you an idea of the richness and suggestiveness of this scholarly paper. From the *American Druggist* we clip the following item, which we commend to the blind devotee of galenics:

Why were the two ipecac roots of commerce included under one official title in the latest revision of the United States Pharmacopeia? This is a question which is being asked by both pharmacists and physicians, and the response of the revisers of the Pharmacopeia who were responsible for the change will be awaited with much interest. Pharmaceutical chemists have been aware for some time past of the difference in alkaloidal constituents which distinguishes the Rio root from the Carthagena variety, and many physicians are also alive to the knowledge that when they order preparations of ipecac of the new Pharmacopeia they may or may not get a preparation made from the root containing the greater proportion of the more purely expectorant principle, emetine, and a comparatively lesser amount of cephæline, the true emetic constituent of ipecac, notwithstanding the fact that any therapeutic standing possessed by the root was based on results obtained with the Rio root (the root of *Cephaelis Ipecacuanha*).

Camphor and phenol, equal parts evaporated by heat 4 oz. to 1,000 square feet, kills mosquitoes and stuns houseflies.

Curious, how far the druggists are ahead of us in this matter. The modern pharmacist manages fairly to disguise the contempt he feels for the chaotic, antiquated therapeutics of the physician, and must speculate now and then on the latter's reasons for adhering to this old trash when he offers us so much better materials. In fact, at a recent meeting of pharmacists the president in his address advised more time to be given the galenics and less to the alkaloids because the latter were *too scientific for the times*, and it would be well to wait till the doctors caught up! Possibly one way to settle the difficulty between us and them would be to improve our methods until we won back the pharmacist's respect. It will not do to assume the high and mighty with him—he is behind the veil.

In the last *Southern Clinic* C. E. Buck describes a case in which a dose of apomorphine cured a remarkable array of symptoms by ridding the patient of an almost fabulous quantity of toxic material. Truly, the doctrine of gastrointestinal autotoxemia is a master key that unlocks many an obscure corner door.

In the *Chicago Medical Times*, J. M. Mitchell makes a strong plea for calx iodata, especially in croup, and he is not afraid to say membranous croup right out loud either. He proves his case also by producing the false membrane. Like all believers in this drug he distinguishes between true croup and laryngeal diphtheria.

In the *Memphis Medical Monthly* F. E. Lee presents his plea for the alkaloids in an address delivered before the Monroe Co. Medical Society. That's the way to do it. Do not let your society run down into a mutual admiration society or an arena for some city surgeon to spread his plumes, but get down to brass tacks and talk to your brethren on topics of vital import to them

Fl. ext. squill as obtained from the manufacturer fluctuates between 30 and 140 per cent of the standard.—Houghton, *J. A. M. A.*

and you in your own daily work. It freshens things up and makes men glad they came, and resolved to have their own say at subsequent meetings. That is healthy, where each man has his own part to do and does not sit like a schoolboy and listen. If you can teach your fellows, well and good; if you are mistaken, well and better, for you will have learned something you should know. Attend your own home societies, subscribe for your local journals, and make yourself heard in both. Don't imagine that the few abstracts appearing in the big weeklies comprise all or a little bit of the good things printed in medical journals.

Just listen to this utterance from one of the most fearless of them all, the *Cleveland Medical Journal*:

We have often been surprised to hear medical men in high places give public utterance to a sweeping condemnation of the use of drugs in the treatment of disease, without specific mention of the drug or the circumstances which call for their condemnation. Unguarded expressions of this kind are misleading, dogmatic and unscientific. Such criticism of drugs is not justified unless both drug and disease are specified.

To teach that drugs are akin to foreign deleterious substances when introduced into the human body is to foster a deep-rooted superstition. In the same false sense are foods foreign substances. Drugs, however, although they require no loss of time, no machinery to operate, no expensive attendants, still furnish to him who is skilled in their use an agency more potent for good, more practical in application, more convenient of carriage and self-administration, more definite in quality and length of action, more specialized in its effects on various parts and organs of the body, more likely to give the immediate or remote results desired, than does any other single therapeutic measure.

There's richness for you. The whole editorial is just as strong and sensible and we would like to reprint it if we had space. Better write and ask for the journal—for

Therapeutic results from fl. ext. squill 1900 U. S. P. will be variable and considerably less than from the 1890 formula.—Houghton.

December, 1905. There are many other good things in it.

No man can be a first-class physician who is not conversant with general science and general literature. To have a taste for literature is to prize Shakespere, and to appreciate Wainwright's paper in the *Dietetic Gazette*, on the "Medical and Surgical Knowledge of Shakespere." The work is too important to be limited to a periodical and we trust we may see it published in book form.

In the *Medical Record* Morris tells of a case in which he removed completely the ovaries from a woman and ingrafted parts of healthy ovarian tissue from another woman being simultaneously operated. Success followed, menstruation was reestablished, and in time the woman became pregnant and bore a living child, which she was able to nurse. Surely, with such triumphs, one need not wonder at the tremendous suggestive influence exerted by modern surgery. Many questions of profound interest are sequent to this case. Will the child resemble the woman who bore it or the one who furnished the ovarian stroma, and presumably the ovum? In fact, the old question of who is the mother of the chick, the hen that laid the egg or the one that hatched the chicken, comes up with renewed interest.

The transmission of hereditary disease and tendencies comes also in question. Could an animal variety or species whose females had become extinct with a single exception be multiplied by similar grafting?

We cheerfully admit that such results are beyond the use of even the active principles. We have no drugs that will accomplish so much. But the fact that such a triumph has been won by modern surgery may render more acceptable our contention that progress in drug therapy is also possible, and that we

Dogs and probably horses are liable to infection by *ankylostoma duodenale* by mouth and skin, and may transmit it.—Peri.

have already made some advancement ourselves along these lines.

THE SECTION OF OBSTETRICS, A. M. A.

In our report of the Boston meeting of the A. M. A. in the August number of *CLINICAL MEDICINE* we made the statement that "the section of Obstetrics should be renamed that of Abdominal Surgery, since nothing else was presented there." Dr. C. S. Bacon of Chicago, the ex-chairman of the section, writes us that its official name is "Section of Obstetrics and Diseases of Women," the scope really being somewhat larger than implied in the item mentioned. He further says:

"In the program prepared by the section officers a third of the papers were obstetrical and nearly all the rest gynecological. A few of the writers of obstetrical papers were absent, so that the number of these papers was less than desired; yet the mention of a symposium on dilation of the gravid uterus, the paper of Dr. Montgomery on uterine myomata complicated with pregnancy, and that of Dr. Boyd on anterior fixation of the uterus complicated with pregnancy and labor, will show that valuable obstetrical papers were given. All the rest of the work pertained to diseases of women. It is true that there were three papers that might have been presented equally well in the surgical section, namely that by Dr. Gallant, "Success the Surgical Desideratum," that by Dr. Marcy, "The Best Method of Closure of Aseptic Wounds, Especially of the Abdomen," and that by Dr. Boldt, "Hand Disinfection." These papers referred, however, especially to gynecological procedures."

We are glad of this opportunity to give publicity to Dr. Bacon's statement concerning the work of this valuable section, which

A great advance has been made in medical science—a new name for nuclein has been devised—*opsonins*!

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it was not our intention to decry in the least, and we trust that this technical correction will travel even further than did our error.

THIS IS GOOD HORSE SENSE.

We hold some truths to be self-evident, and among them this, that when any man has been entrusted with the care and safe-keeping of funds belonging, not to him personally, but to an association or organization of which he is merely one member, he shall faithfully retain those funds for the benefit of their true owners, and not dispose of them for his own purposes or dissipate them in the hands of persons not entitled to possess or enjoy their usufruct.

We physicians, as members of the ancient guild of medicine, possess in common, certain pieces of valuable property, the knowledge that has gradually accrued to the guild and has been handed down from generation to generation with the increments of each. This fund we have the right to use for our own support and the benefits of suffering humanity, transmitting it with due increase to the next generation of physicians. But we have no possible right to squander it on a public that is in no manner entitled to possess it.

The most common and apparently trivial bits of information may be part and parcel of this trust, and not ours to thus dispose of. Take the simple fact that a little glycerin injected into the rectum will, by exciting exosmosis, act as a cathartic. How many arduous labors on the part of chemists and clinicians were necessary to the establishment of this fact? That the glycerin employed only costs a cent has nothing whatever to do with the value of the fact. The man who whirled a child in the air and caused a foreign body to fly from its larynx rightly made a charge of \$100 for his ser-

Of therapeutics of chorea not much can be said. (Why?) There is no specific but arsenic comes near it.—Owens, *Med. Herald*.

vices, although he did not expend even one cent for material.

A man was being treated by a great eye specialist for syphilitic iritis and called the writer in consultation. Years after this, when the eye-surgeon was in his grave, the same man called us to his infant, dying. The remembrance of the father's disease saved the child. For years after this the man wondered that whenever any of his family were ill, no other physician could do them any good, and he had to call in, sooner or later, the one who alone could promptly and surely give relief. Had we not kept to ourselves the key to the situation, the man would have been as wise as we, and our hold on the family would have been lost. It is but a step from knowing that syphilis is present to that of buying a few pennies' worth of mercury or iodide, and not only we ourselves but the entire profession would have been out.

You do not have to tell all you know; you are not expected to and should not give away professional knowledge to the laity. It is not yours to give. You did not originate it. Instruct the laity in the application of modern hygiene, for this is a public duty, and the more they know of it the better are they qualified to aid us in our professional work, and to uphold us in our efforts to improve municipal hygienic conditions. But this is where to stop. We may tell our patient's attendant what symptoms indicate the full desirable effect of our medicines and when to stop them, but we do not tell exactly what they are. The play between defervescents and dosimetric triads in fever may seem simple and easy to us, but we surely could not permit the laity to procure and administer them without professional oversight.

And now we come to the text of this discourse—for goodness' sake quit leaving your

For the first years of practice most men should confine their attentions strictly to the cases they meet.—Benedict, *Med. Herald*.

medical journals and price lists lying about where patients can get at them. These things are for your own personal use, not intended for office tables to amuse waiting patients. Scarcely a day passes but we receive the journal order-blanks with money enclosures, subscribing to CLINICAL MEDICINE and requesting medicines, whose prices have been ascertained from lists sent to physicians.

How do you suppose a patient feels who has just paid you a suitable fee for advice, when in the price list he discovers that the medicine you dispensed to him costs you just two cents? Even if he admits it and the advice were well worth five dollars he can not rid himself of the feeling that yours must be a wonderfully lucrative business, and in proper self-protection he must jell you down to a reasonable point.

This thing occasions us so much annoyance, so much time is taken to say "no" and explain, that we have considered the propriety of keeping standing on our front cover the injunction to the physician that he shall keep the journal away from patients. But if we do this every lay person who sees this will jump at the conclusion that there is something of particular interest to him in it, and *that* copy will promptly disappear from the doctor's office.

Be good now, and help us out. Lock up your price lists, keep your journals away from the waiting room, don't tell your patients what you are giving them; don't use the labels of the manufacturer; don't tell your patients to send to so-and-so for so-and-so. Do be sensible and look out for yourself.

STATE BOARD EXAMINATIONS.

At a recent State Board examination seven candidates presented themselves, four recent graduates and three old practitioners. All

They say out in Iowa that if a citizen of that wealthy state wants to be poor he has to emigrate.

the recent graduates succeeded, all the experienced practitioners—all graduates of first-class colleges—failed. The failure was on chemistry and pathology. One of the questions that was not satisfactorily answered was, how to make nitric acid. Can anyone doubt which section of this class was best calculated to properly and safely treat the people? Why should any physician make nitric acid? If he were to pass into the employ of any manufacturing establishment that wanted him to make nitric acid he would hardly trust to the distant studies of his pupilage, but obtain the recent books and post himself on the latest methods.

If the legislatures comprehended this phase of the subject does anyone suppose they would pass laws establishing such boards "for the protection of the people against incompetent practitioners?"

A man has attended the best medical college open in his day, has graduated, and has passed the best part of his life in the useful, honorable practice of his profession. Circumstances arise, his wife's health has given way, and he is compelled to sit by and see her die or take her to the climate best calculated to cure her or prolong her life. But he has been a true physician, giving his whole time and thought to his duties, has saved no money and paid no attention to the theoretic and unneeded parts of his profession, has given attention to chemistry only in so far as it has been requisite in his work; consequently he has failed to keep up with the constantly changing opinions in such departments. He presents himself before a board on which is a man who makes chemistry his study. His view of the study is radically different from the practitioner's, and to him the latter appears to be so woefully deficient that he is unable to pass him.

We have no fault to find with the recent graduate. He is the hope of the profession,

Rheumatism: Salicylates should be pushed to physiologic effect and then lessened as they cause anemia in time.—Walton, *Va. Med.*

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and his fine proficiency in modern science should make of him a superior practician in the future. But—we have met a good many of him, and have yet to meet one whose knowledge of drug therapeutics sufficed to make him, without practical experience, a safe and trustworthy practician. Which is the man to take care of your own family, the man who can not make nitric acid but who has been in constant practice for many years, and who reads the journals and keeps up with the times in all that pertains to his work, or the man who, crammed to the ears with the teachings of the day, has never given a dose of medicine or had on his shoulders the responsibility of a human life?

The facts should be placed before the legislatures and the members should then say if this is the ideal for which they have constituted state examining boards.

A naval board was once examining a midshipman for promotion. He was asked if he had studied French. He had.

"Tell us how you would call all hands in emergency, with a crew of French."

"I can not."

"How would you tell them to take in sail?"

"I do not know."

"How would you bring the ship to anchor?"

"I do not know."

"Tell us any order you could give in French."

"I could give none."

"Then what the mischief do you know in French?"

"I can say in French—I have the green cat of my mother-in-law's blue aunt!"

DR. BILLINGS' FEE.

Considerable newspaper notoriety seems to be given the fact of Dr. Frank Billings' having

A mountain granny demonstrated the remarkable efficiency of a puppy in emptying an engorged breast.—*Plecker, Va. Med.*

received a fee of \$25,000 for attendance on the late Marshall Field during his final illness. We fail to see where there is any criticism due. Professor Billings unquestionably stands near the top of the medical profession of Chicago. That he was selected, though a medical man and not a surgeon, as president of the American Medical Association, shows that his reputation is not confined to his residential city or state. It is common repute that he numbers among his patients many of the millionaires of the city, and when he left his practice to spend a prolonged period in attendance on Mr. Field in New York City, he necessarily incurred an immediate and a remote or permanent loss, by patients being compelled to seek the aid of other practicians, some of them probably remaining permanently with their new advisers. There was no question as to the ability of Mr. Field to pay the sum, and those who knew him need not be told that he was not in the habit of allowing anyone who served him to be a loser for it. Under the circumstances the charge seems a reasonable and even moderate one, and we question if Dr. Billings would have done justice to his colleagues had he assumed the tremendous responsibility of such a case for less.

TECHNIC.

Every modern surgeon insists on the prime importance of an elaborate and scrupulous technic. The surgical articles that fill the current medical journals describe this technic in great detail. If a man has nothing to say for himself he compares the technic of several masters in surgery. It is technic this and technic that, until it seems impossible to perform a surgical operation without a printed card before the eyes of the operator on which the details are given, and on which

The best means of enriching the nursing mother's milk supply is feeding her well, on lentil soup especially.

he must fix his attention that no deviation occur.

We do not find articles in the journals telling how the writer employs in all operative procedures Killgerm's "compound antiseptic and tissue vitalizer," but for each step of his work the surgeon employs one or another special agent—one to prepare the instruments, another for the skin, a third for his hands, etc., etc. Simple and well-known agencies are alone utilized, things whose powers are sure and single, unerring, never doubtful or variable. What exactness, what precision, what certainty, are required.

Some of us believe that a similar exactness of technic would be a good and desirable thing in the use of internal medicines. We think that such elaborate care and such nicety of application would bring correspondingly precise results. Moreover they believe that this can be accomplished by the observance of a few simple rules:

Know exactly what is the matter with your patient.

Know exactly what medicine will restore normal conditions.

Give of the right medicine exactly enough to restore normal conditions, and then stop it.

Can this be done, and how? Ah, gentlemen, now you are entering upon an investigation of active principles and their applications. Go ahead. You are on the right track, and getting warm.

TRUE MEMBRANOUS CROUP AND LARYNEAL DIPHTHERIA: A DIAGNOSTIC REMEDY.

People will persist in holding us personally responsible for everything that appears in this journal. They totally mistake the purport of our work. We constitute a clearing house for a great connection, and our business is to collect and record the observa-

An excellent food-drink for a nursing woman is a rich decoction of Iceland moss, which contains a great blood-maker, cetrarin.

tions they make and report to us. This croup business well illustrates this. Years ago correspondents reported to us that they were meeting with remarkable success in the treatment of membranous croup with a certain preparation of iodine and lime. This was not an alkaloid or an active principle. We had no interest in it, in fact had never heard of it. But the reports indicated that there was something in it—the reporters were so positive and such good men. We are not too hidebound to blind us to things of value outside our own little hobbies and the textbooks, and we took pains to secure the article and present it to our readers with the field-reports indicating its possible value. At that time we with many others were uncertain as to our beliefs but rather favored the dictum that croup and laryngeal diphtheria were pathologically identical, as the easiest way out of a perplexity.

Hundreds and thousands of physicians made reports on the drug. In the main they were favorable to it. Some were not. It seemed to us that the drug varied in character and that the differences in results might be at least partially explained thus. We took pains to eliminate this source of difficulty by having skilled chemists prepare the drug in our own laboratory, of absolutely uniform quality. Still, there were discrepancies in the results achieved. Analysis of these showed that when clinicians established a diagnosis between true membranous croup and laryngeal diphtheria they invariably found the iodized lime effective in the former, but those who insisted there was no pathologic difference and that all membranous croup was diphtheria, invariably found the treatment unsatisfactory. The result has been to alter our own views as to the two afflictions, and we now believe that there is a true membranous croup that is a manifestation of the same disease present

Beer, porter and all alcoholics should be absolutely prohibited to the nursing woman; swill that makes babies toppers.—Plecker, *Va. Med.*

in catarrhal croup into which it shades imperceptibly, the highest grades being the membranous forms. In these the characteristic microorganisms of diphtheria are not found, unless a diphtheritic invasion occurs as a superaddition to the original disease.

This conclusion has been forced upon us, and is in no way dependent on or connected with our advocacy of active principles. We are simply unable to account for the phenomena presented by the cases occurring in the practice of ourselves and very many others on any other hypothesis. We advocate strongly the use of antitoxin in diphtheria, as the duty of the physician in all true diphtheritic cases and even in all possibly diphtheritic ones, since the dangers of delay are infinitely greater than any possible harm from the serum. But we are unable to make a fetish of antitoxin and to see no possible good in anything else, as so many are now doing. In true diphtheria, sulphide saturation has accomplished so much that we are as positive in its favor as we are in that of antitoxin. We place these two remedies side by side, calx sulphurata (pure calcium sulphide) for true diphtheria, calx iodata for true membranous, non-diphtheritic croup, because we are unable to escape from the clinical proof of their efficacy that has been presented to us. That we advocate these remedies, despite the fact that they are not "alkaloidal," might be set down to our credit by those who have accused us as unable to see anything outside our "fads," but such fairness is not to be expected from the Philistines who demand absolute subjection to whatever happens to be the prevalent belief of the day. So they are pleased to account for our advocacy on the ground of "commercialism." How we detest that word. Anything, rather than make a really impartial investigation of the merits of an idea!

The Central Tri-State Medical Society, Ohio, West Va. and Ky., has wisely selected the *Va. Med. Semi-Monthly* as official organ.

We advocate nothing we do not know! We present our readers a summary of the verdicts of our readers themselves on the means and methods that have been suggested to us by them, or by observers in all parts of the world. Our views are founded on these multitudinous experiences, our own as well as those of others. If we advise any drug it is because our readers find it useful; if we urge it, it is because they urge it upon us. The whole matter is strictly automatic.

MONEY TO INVEST—HELP WANTED.

The best investment that a doctor can make is to subscribe for one or more good medical journals. He can hardly take too many if he takes good ones—and reads them. It's a poor journal that will not pay for itself ten times over in a year. So far as CLINICAL MEDICINE is concerned, there are very few of its readers, i. e., the men who *read and apply*, who do not annually realize dividends of from 100 to 10,000 per cent on the dollar they send us for this journal. When we were attending the Boston meeting of the A. M. A. a Massachusetts physician introduced himself to us with this statement: "I'm going to take a fishing trip this year. The Journal and its teachings have added \$500 a year to my income. I can afford it."

And yet doctors talk about *economizing* in their reading matter. Economy—is it? Why, Doctor, the economy is all on *your* side. Your journal costs you but a dollar a year, and at the least calculation it pays you ten times that amount. Really, you ought to "divide up" with us!

The next best thing, the most natural way to show that you like us and CLINICAL MEDICINE, and to help us in our fight to strengthen therapeutics (whereby we are endeavoring to help the doctor in his daily fight with dis-

The energy liberated in transmuting an ounce of silver into gold is worth far more than the product. S-oddy, *Red Cross Notes*.

ease) is to help us get the journal into the hands of thousands of doctors who ought to be reading it monthly, just as you are reading it. We now have about 40,000 readers, but we should have 100,000. We can have them if all our friends will put their hands to the plow and help us to cultivate this great, fertile, almost untilled field. Personal work will do much. Talk CLINICAL MEDICINE; talk about it; talk about the articles in it that you like; lend your copy to your friends and get them to read some of the good things.

There is a great opportunity for good agents in our subscription work. We have had a number who have done excellent work, among them a number of medical college boys, who have worked both among their fellow students and among physicians. There is a splendid chance here for a large number of bright men, especially those who have had some experience in soliciting or some aptitude for it. Every doctor knows of one or more such men. Will you not interest them in this work and persuade them to write us concerning it—or, better, write us yourself? We can make terms which will prove attractive and profitable. We want only men whom you can personally recommend and upon whose honesty and energy we can depend. Doctor, will you do this for us and so liquidate, in part, that debt of gratitude which we know you want to pay? Help us get 40,000 more.

SUCCESS THE TEST OF REAL GREATNESS.

Sidney Smith once said, it is of no possible use to pretend to be what you are not. The world is wonderfully clear sighted. It quickly sees through any attempt at deception and estimates a man pretty close to his true value. If, then, we cease posing

The esteemed *Druggists' Circular* is still wrestling with the erudite pharmacist who asks what "ad¹⁵" means in prescriptions.

and are our own proper selves, people who like and approve of us do so for ourselves as we are, and those who do not, would be only worse disposed to us if they also detected us in pretense and deception. Somehow, though the world may grow more learned, it does not grow wiser, and it is difficult to improve on those who have long preceded us.

Few men are so symmetrically developed that they can bear success without undue elevation of self-estimation following. The tendency to swelling of the bump of self-conceit is all but universal. Herein lies the vulnerable heel of the man who has made his pile and goes into the stock exchange to teach those duffers what a real man can do. It is said, and may well be true, that the advent of such a man is the signal for a conference of the sly old foxes, who ascertain the size of his pile and agree on its division among themselves before he has invested a dollar—and they rarely fail to make good. That is what is said to have happened to Jim Keene, but the indomitable spirit with which he proceeded to gather up the broken threads and regain a place in the financial world has no parallel. He has lived to see his great opponents in their grave and is still alive, rich and powerful. No second case has occurred of sufficient prominence to be cited.

"All the world's a stage," and each in his time plays many parts; and some few finally ascertain their own special fitness, and settle into the niche for which nature designed them. Happy they! Jealousy and envy toward the next higher do not destroy their peace or impair their usefulness. There are two ambitions, to rise higher in the esteem of the public, and to better fulfil the duties of the position to which they have gravitated. The latter is usually ignored by the persons who make frantic appeals to our youth to

Effect can be more quickly and certainly had from any remedy alone than with sugar, starch, dirt, etc.—Landers, *Southern Clinic*,

climb beyond the limits of fertility into the barren and lonely heights where dwell the eagles. That these soaring birds have to stoop to the lowlands to get their meals is generally ignored.

Success is the most difficult trial a man can be called on to endure. There is so much between self-confidence and self-conceit, but so little apparent to the man himself. The difficulty is that the attention is concentrated on one's self, and too little pains taken to estimate the other fellows, their qualities, aims and resources. The tendency to big-head is so universal that after every new achievement a man ought to take himself to task and ask if he has developed the malady. There are always and emphatically others, and we are in the end usually glad to range ourselves as possibly no worse than the general run, instead of away up front with the leaders.

TOO MUCH DRUGGING.

A correspondent objects to subscribing for this journal on the grounds that there are too many medical colleges and journals, and if he did subscribe he would probably spend time in reading the journal which he should be devoting to earning money. Further, he expresses the conviction that we are a too much drugged people.

Good enough. We heartily agree with him on all these points. There are far too many medical colleges, and it would be better for the profession if every one that falls behind in preparing candidates for state examinations were to close its doors and encourage students to go to schools that prove more successful in their work. Make room for the capable teachers on the faculties of the schools retained, *pay them well*, and concentrate equipments and funds

Spondylitis: Ultimate results of mechanical treatment vigorously and faithfully carried out are quite satisfactory.—Blanchard.

to make fewer schools more efficient. Personal greed will prevent such a reform. I wonder if our readers know that very few medical teachers are paid the wages of a day laborer and many nothing at all?

There are far, far too many medical journals. No man in active practice can possibly read and digest a tithe of them. He should limit himself to those whose perusal will not waste valuable time but afford him such indisputable aid in his daily work as to increase his earning capacities. While all knowledge is of value the matters that most directly improve one's everyday work should receive preference. For this reason, while we are deeply interested in opinions about and the expansion of Ehrlich's theory, an improvement in our means of treating the patients on today's visiting list is of more immediate consequence.

We are "too much drugged." Surely! But no one would say that to give exactly the right drug that will restore health, and exactly enough of it to do this, and no more, and no other drug, is too much drugging. The difficulty is in the miserable practice of giving a lot of drugs that we are not sure of, prescribing by the handful in the hope that some among them may be good. In prescribing drugs of whose action we know little, in mixtures for which we can give no good reason, and of whose action we are not able to judge by clinical observation. It is of this miserable habit of drugging we complain, and we ask our friend to aid us in rendering it repugnant to the sense of the profession.

Doctor, you are just the man for whom we publish this journal; and we are glad that we discovered you. We should work amicably together to eliminate the indiscriminate use of drugs of all kinds and toward a more accurate, simpler and more effective therapy.

That forcibly ~~breaking~~ breaking up ankylosis in ~~hip~~ hip disease awakens the tuberculosis we regard as a superstition.—Blanchard, *Chi. Med. Recorder*.

LEADING ARTICLES

THE TREATMENT OF TYPHOID FEVER; WITH REPORT OF EIGHTY CASES*

BY J. M. HEYDE, M. D.

HIPPOCRATES says: "Experience is fallacious and judgment difficult." The truthfulness of these words was forcibly brought to my attention when I was informed that I was to prepare a paper on the treatment of typhoid fever to be read at this meeting. I, indeed, found it difficult to decide if I were to pursue the time-worn path of our forefathers and give you a stereotyped, cut and dried, systematic, text-book treatment, or should diverge and strike out boldly and by myself in clear water and give you our views, conclusions and experiences for what they are worth.

After due deliberation, I chose to do the latter, and in the preparation of my paper have given no quarter, and in consequence ask no leniency in return. I therefore have no apology to offer for speaking to you on the subject of typhoid fever. It is a subject much discussed, and well it deserves to be; for here we are dealing with no ideally specific disease, but with one of diverse manifestations, and presenting many severe complications and sequelæ.

At the beginning I will state that I can not discuss all the methods of treatment advocated. They are numerous and diverse and with the most of them you are familiar. I shall, therefore, endeavor to give you the combined experience of Dr. J. G. Stucky and myself and outline the

method of treatment we have found most satisfactory.

We believe there are two factors involved in the pathogenesis of every case of typhoid fever. These are, first, the infectious or primary, and, second, the toxic or secondary. The first results from infection of the intestinal lymphatic follicles, spleen and blood by the bacillus of Eberth, and gives us a characteristic and well-known morbid picture, such as hyperplasia, sloughing and gangrene, ulceration and healing of the intestinal lymphatic follicles, mesenteric lymphangitis and lymphadenitis, enlarged spleen, and in severe cases a typhoid septicemia. The second or toxic factor gives us the various cellular degenerations and micro-chemical alterations characteristic of the disease. This toxic factor has a double origin, one from the specific toxin of the Eberth bacillus—a typhoxemia, which is mild; and the other from the toxins generated by the extensive intestinal putrefactions—an intestinal autotoxemia, which is usually severe. This extensive intestinal putrefaction appears to be due to the Eberth bacillus accelerating the normal intestinal putrefaction. (Bouchard)

Symptomatically, the infection, *per se*, gives us but few symptoms and signs; but they are the diagnostic marks of the disease, such as tenderness, rigidity, splenic enlargement, rose spots, Widal reaction, perhaps some of the acceleration of pulse and eleva-

*Read at the 6th Councillor District Medical Meeting held at Orrville, O., August 14, 1906

tion of temperature, and hemorrhage and perforation, when they occur. The toxic symptoms are, however, in control of the situation; they are fever, rapid pulse, nervousness, restlessness, insomnia, headache, boneache, delirium, diarrhea, tympany, prostration, etc., all symptomatic of the severe intoxication.

Therapeutically we have to consider remedies directed to these two processes.

Of remedies that are antagonistic to the infectious process we know of none that is specific, and a few only that are antagonistic. Theoretically, nuclein would do good by fortifying the phagocytes. Quinine should act likewise. Occasionally they are of service. Echinacea at times appears to benefit some, but how we can not explain; it can not be considered as even paralleling a specific action. Serum therapy may some day come to our aid with a specific, but what must we do until the serum arrives? To wait for it will do our present patients no good. We must do the next best thing, direct our attention to the intoxication and that is precisely what we do.

For the toxic phenomena our remedies are many. We must now consider their specific indications, bearing in mind the double origin of the toxins, specific and autogenic. For the specific toxin we have as yet no reliable remedy. Much has been done to find a specific antitoxin; but this work has been entirely unfruitful, and it will continue so to be until men realize that the symptoms of typhoid are not due to a simple, single toxin, but to a complex combination of toxins of various origins. A few workers in this line have published methods and results from time to time but to date we have no trustworthy antitoxic remedy.

For the autogenic toxins, however, we have a therapy approaching the specific. Therefore, having no remedies for the in-

fection and its specific toxin, and remembering that the symptoms are mostly those of the autogenic toxins, we are forced to consider the therapy of the autogenic intoxication as constituting at present our only available and reliable therapy for typhoid fever.

We, therefore, can divide the treatment into, first, essential and, second, accessory.

We will first briefly discuss the essential treatment, then pass on to a consideration of the accessory treatment. We mean by essential treatment, treatment that is indicated in every case of typhoid fever, whether mild or severe, and from the first to the last day of the disease. We hold that there are three essentials, and just three, in the treatment of every case of the disease. These essentials have been so admirably expressed by Dr. Abbott of Chicago that I can do no better than adopt his classification of them. I shall now proceed to tell what these essentials are and how they are effected.

They are:

1. "Clean out" (eliminate).
2. "Clean up" (antisepticize).
3. "Keep clean."

First. To "clean out" means thorough and complete evacuation of the gastroenteron. This may be accomplished in various ways, probably most satisfactorily by initial small doses of calomel (1-4 grain hourly for four doses) followed by a sufficient dose of castor oil.

In obstinately constipated cases it will be necessary to add repeated and copious colonic flushing. There are cases of typhoid with extensive coprosclerosis where the colonic flushing is indispensable.

The *modus operandi* of this part of the treatment is self-evident. By evacuating retained fecal and excretory products we aim to remove the nidus of putrefactive and fermentative intestinal toxins. These toxins, generated by decomposition processes,

The primary deformity in typical rachitic bowleg is in the lower third of the femur; exaggerated outbend.—Blanchard, *Am. J. Orth. Surg.*

An ununited profession is the one remaining obstacle to achievements in medicine such as the world has not yet dreamed.—Wilcox, *N. A. Jour. Homeo.*

are absorbed and must be rendered inert in the process of metabolism. This involves an expenditure of energy and an evolution of heat. Also by free evacuation we remove all sources of mechanical irritation, as hardened feces, undigested residues, etc.; also possibly by removing a few million Eberth and colon bacilli we remove a prolific source of irritation, for evidently lessening the dose of bacilli would tend to conserve the natural immunizing powers of the patient. In a word, we strike at autotoxemia, one of the greatest if not the greatest thermogenic factor of the disease.

Therefore, we eliminate autotoxemia and mechanical irritation from the patient, thus reducing the metabolic body changes, diminishing thermogenesis and conserving energy.

But—this must be done early before a case advances to sloughing and ulceration.

When the patient has once reached this condition, you all know that thorough evacuation of the intestinal tract is fraught with dangers, such as hemorrhage and perforation. The ideal time for cleaning out is during the first week, before sloughing and ulceration have occurred.

The second essential, "clean up," means as thorough, complete and efficient antisepsis of the *prima via* as is possible. This is most successfully done by the persistent administration of the sulphocarbonates of sodium, lime and zinc, singly or combined, as indicated.

The sulphocarbonates may be given in pill, capsule, powder or solution, preferably in solution. If the stomach is irritable they are to be preceded a few minutes by a gastric sedative, as carbolic acid, bismuth, creosote, cocaine, pepsin, ingluvin, etc., or they can be combined with these remedies. From 5 to 15 grains is the ordinary adult dose, repeated in two hours. We find it

better for the first day or so to start on the smaller doses until we ascertain the gastric tolerance for them. If there is much diarrhea the zinc salt is indicated or a combination of zinc with lime or soda. If the stomach is irritable or acid the sodium salt, and when the destruction of tissue is rapid, the calcium salt is indicated for its reconstructive property. The sulphocarbonates must be given to effect and from the start. They must not be given in a half-hearted manner, but to complete deodorization of the stool.

When they are unsatisfactory, we find, is when they are given in insufficient doses. Three to five grains three or four times a day counts for absolutely nothing.

The secret of success with the sulphocarbonates is in giving to effect, until the stools are deodorized and antisepsis attained.

As the stool becomes inodorous we find that the fever falls one to three degrees, the diarrhea, tympanites, intestinal pains, tenderness and gurgling cease, the headache, boneache, nocturnal delirium and restlessness disappear, the gastric irritability is gone, and all the symptoms are ameliorated.

We find that the duration of the fever is shortened, the severity of the disease lessened, and the proportion of abortive cases increased. The earlier and more efficiently the sulphocarbonates are given, the more marked is this amelioration of symptoms. The convalescence is short, emaciation slight and complications and sequelæ almost unknown.

There are a few cases of typhoid with severe and persistent gastroenteric irritability—the so-called gastrointestinal form of the disease—in which the patient will not tolerate the sulphocarbonates, or only tolerate them in very insufficient quantities. In these cases we must rely on the do-nothing, expectant treatment until the gastric irritability subsides, when they are again to be

If you are the leaven of the loaf, disseminate. Do not wrap the tinfoil about you and remain a yeast-cake.—*N. A. John, Homeo.*

Uric acid overproduction is due to defective oxygen supply, overfeeding, disturbed nervous mechanism.—W. H. Porter, *N. Y. M. J.*

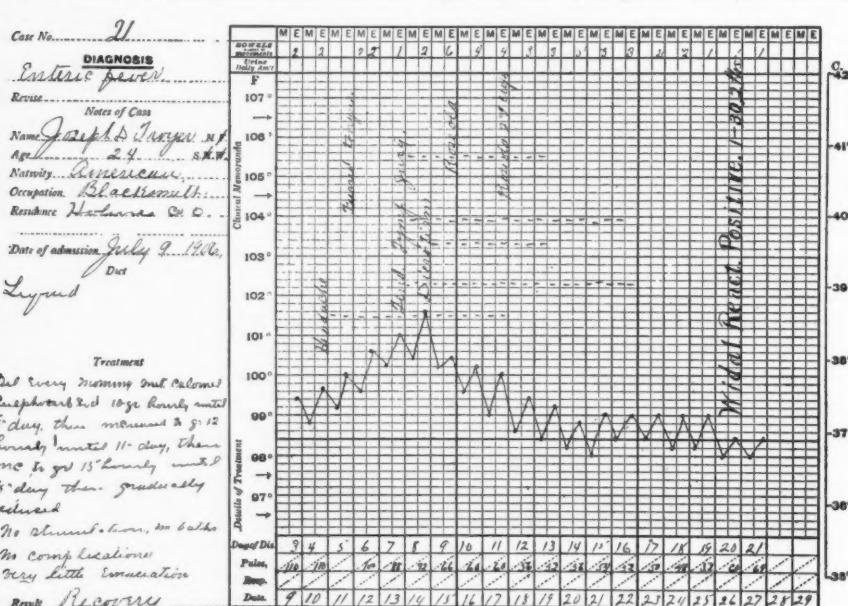
LEADING ARTICLES

tried; but they are then likely to be too late to produce decided benefit. The damage is done. Judging from the effect of these remedies we believe (and we are not alone) that the greater part of the symptoms of typhoid fever is due to autotoxemia. But let this be as it may, when the sulphocarbonates do the work we are ready to stand by them—to use them and to advocate them.

Their entire physiological action has not

efficient preservatives of the same. This can be definitely proven by experiment, as was done years ago by H. C. Wood, Sr.

But they may have more than a local action; this is not fully known. Some of the salts are absorbed and split up in the body; part of them seem to be decomposed into phenol and sodium sulphate, the latter being eliminated with the urine, the phenol further splitting into hydroquinone and pyrocatechin



Clinical record of a typical case of typhoid fever, treated with the sulphocarbonates. This shows in a most graphic way the remarkable change in the symptoms effected by the sulphocarbonates. Note the diagnostic signs—roseola, gurgling in iliac fossa and Widal reaction.*

been explained. They are freely soluble in water, but to what extent they are absorbed is not definitely known. We know they are eliminated as sulphocarbonates in the feces, and by this we are lead to infer a local action. We know they are powerful agents to prevent putrefactive processes in meat, and are

and leaving the body by the lungs and kidneys. They may have an unexplained constitutional effect (Abbott). They may prevent the multiplication of the bacteria, or retard their toxic production; may have an autotoxic effect or have ability to increase the natural immunity or act in some other unknown manner (Abbott). The sulphocarbonates being phenols (i. e., salts of phenic

*Dr. Heyde sent us a large number of these charts, showing the results of treatment with and without the sulphocarbonates.

Functions, not histological appearances, are what we should strive to recognize in kidney disease.—Cabot, N. Y. M. J.

Albumin and casts alone never prove the existence of nephritis. They may or may not accompany it.—Cabot, N. Y. M. J.

acid) can exert what Bouchard calls a "de-poisoning action." However, the fact remains that when they are given to effect they do the work, and this is the therapeutic test. We have repeatedly given as high as 300 grains a day without unfavorable symptoms and thus regard them as strictly non-toxic.

A word of warning may not be amiss. Use the c. p. drugs only, and know that they are pure by knowing your brand.

The advantages of the sulphocarbonates are their cheapness and reliability. Their disadvantages are that they are not made in Germany and have no large pharmaceutical house to push them.

The third essential, "to keep clean," is accomplished by continuing the "clean out" and "clean up" principles faithfully. Clean out your patient every day with sufficient doses of castor oil or castor oil and enemas. This do every day, diarrhea or no diarrhea, but only when you have treated your patient thus from the onset of the disease. Other laxative preparations, as the cascara preparations, etc., may be used when there is an objection to the oil, but with them we have had little experience.

The "keep clean" principle must be accomplished in two ways: First, by a continuation of the "clean out" and "clean up" principles until effects are noticed or until the stool is deodorized, and second, by a properly regulated diet.

Theoretically the absolute withholding of food would be ideal, but it is not practical; patients object to being starved and emaciation is too extreme. Therefore we allow our patients a liberal liquid diet, one that leaves the least undigested residue and one that is not prone to rapid putrefaction. We find milk, eggnog, albumen water, barley water and plenty of plain water to best meet these indications.

L. F. Bishop in *N. Y. M. J.* calls attention to the importance of the study of cases showing constitutional low arterial tension.

We also usually make the temperature somewhat of a guide in the administration of our remedies. If the temperature remains high we increase our sulphocarbonates until we bring that fever down. It acts a little slower than hydrotherapy, but more efficiently. It keeps the temperature down. By employing these principles in your typhoid fever cases you will have no hemorrhage or perforation and your cases will be so mild that you will be in doubt as to whether they really are typhoid or not. In fact, we believe that when this treatment is applied early and persistently a great many cases can be aborted; surely ulceration a great many times can be prevented, and this we believe, Osler or no Osler.

We will devote but a few words to what we have designated accessory treatment. By accessory treatment we mean all other methods of treating the disease, its complications, sequelae and exaggerated symptoms. We include the methods of Brand; the expectant, modified, symptomatic, eliminative, etc. Thus, celiotomy for perforation; posture, ice to abdomen, opium, ergotin, digitalin, etc., for hemorrhage; turpentine, pepsin, bismuth, charcoal and astringents for diarrhea and tympany; hydrotherapy for fever; cardiac stimulants, hypnotics and nerve-sedatives for cardiac asthenia, nervousness, restlessness, insomnia, etc.

But these therapeutic indications I will not detail, since with them you are all familiar; suffice it to state that when the "clean out," "clean up" and "keep clean" principles are faithfully carried out, they are seldom indicated, seldom needed.

I will present a few clinical records, demonstrating typical cases treated both with and without the sulphocarbonates, and also give our results in the treatment of this disease for the last few years.

We have notes on 80 cases treated, some

Perhaps in most cases pruritus ani is due to irritating secretions from the bowel, from impacted fecal collections.

with, some without the sulphocarbolates. Of this number of cases 56 were treated by Dr. J. G. Stucky and 24 by myself. Of the 56 cases treated by Dr. Stucky our records as to complications and duration are not available; however, I am in possession of the methods of treatment and results. Of the 56 cases 42 were treated with the sulphocarbolates, 14 were treated expectantly. Of the cases treated expectantly 2 died and 12 recovered. Of the 42 cases treated by the sulphocarbolates one died, death being due to cortical cerebral venous thrombosis. It is only fair to state, however, that this

carbolates, 12. Average duration of fever in the cases treated with the sulphocarbolates, 17 days. Average duration of fever in cases treated without sulphocarbolates, 29 days. Seven of the 12 cases treated without sulphocarbolates had complications, four of them had hemorrhages. The cases treated with sulphocarbolates were all uncomplicated.

Mortality of cases treated expectantly, two deaths, 16 2-3 per cent. Mortality of cases treated with sulphocarbolates, no deaths.

Summary for the 80 cases of both of us:

We find 26 cases treated expectantly and 54 cases treated with the sulphocarbolates.

CASE	AGE	FEVER DURATION	COMPLICATIONS	TREATMENT	RESULTS
1	26	42	Crural throm. Pyelitis	Expectant and Hydrotherapy	Recovery
2	42	40	Hemorrhage	"	"
3	6	28		"	
4	22	28	Perforation	"	Death
5	3	21	Hemorrhage (small)	"	Recovery
6	26	28	Intox. cardiac asthen.	"	"
7	16	14		"	Death
8	24	34	Hemorrhage (small)	"	Recovery
9	18	40	Post-typhoid anemia	"	"
10	40	40		Sulphocarbolates	"
11	21	20		"	"
12	38	19		"	"
13	6	19		"	"
14	21	17		"	"
15	20	20		"	"
16	14	19		"	"
17	3	15		"	"
18	25	18		"	"
19	30	24	Gastric irritability	Expectant	"
20	14	25	Gastrointest. hemorrhage (sev.)	Sulphocarbolates	"
21	24	19		"	"
22	3	16		"	"
23	16	12		"	"
24	16	12		"	"

was a pauper case that was referred to a township physician who treated her for ten days without the sulphocarbolates, death occurring on the twenty-fourth day.

I have tabulated the age, duration of fever, complications, treatment used and results of my cases for the last six years. While the number of cases is too small to prove any definite conclusions, I think they reflect the superiority of the "clean up," "clean out" and "keep clean" treatment.

This tabulation of my 24 cases shows average age 24. Cases treated with sulphocarbolates, 12; cases treated without sulpho-

carbolates, 12. Average duration of fever in the cases treated with the sulphocarbolates, 17 days. Average duration of fever in cases treated without sulphocarbolates, 29 days. Seven of the 12 cases treated without sulphocarbolates had complications, four of them had hemorrhages. The cases treated with sulphocarbolates were all uncomplicated.

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Summary for the 80 cases of both of us: We find 26 cases treated expectantly and 54 cases treated with the sulphocarbolates.

Walnut Creek, Ohio.

Mr. Saxlehner of the Hunyadi Janos Aperient Springs has resigned from the Proprietary Association of America.

Metschnikoff urges clabber as a preventive of old age, preventing development of intestinal putrefaction germs.

Dr. Heyde's article gives statistical evidence concerning the advantages of the sulphoncarbolate treatment of typhoid fever which it seems to us must carry conviction to any

unprejudiced reader. Success *will* follow adherence to the principles laid down by us so often in this journal, as so admirably outlined by the doctor.—ED.

MEDICAL EVOLUTION: THE NEED FOR A MORE EXACT THERAPY.*

BY W. C. ABBOTT, M. D.

AT THE alumni banquet of the Northwestern University last week Rev. Mr. Mangasarian undertook to explain the cause of the so-called "doctor's failure." He attributed this to failure to make good the enthusiastic reports on new methods, failure in combating diseases, such as cancer, consumption, introduction of new germ diseases, a certain disappointment on the part of the public, as shown by the progress of Christian science, faith cures, Dowieism and other cults, indicating that the people are looking elsewhere for help; and the commercialism that has destroyed the *esprit du corps* of the profession itself.

Have we failed? Looking over our field today we see a wonderful activity among the surgeons, whose achievements have rendered the age illustrious. In all departments of mechanical therapy, and in the development of the newer methods, electricity, vibration, x-ray, hot air, hydrotherapy, massage, climatology, diet and other hygienic measures, in fact in the entire field of indirect therapy the activity is immense. Our periodicals are crammed with the records of this work and ponderous volumes concerning these methods weigh down our bookshelves. Scarcely a town of 5000 inhabitants or more but is equipped with at least one sanatorium in which to apply

these strictly modern and up-to-date remedial methods. Every large town possesses its schools from which are poured a yearly swarm of thoroughly trained nurses, who demonstrate how much may be done for the suffering when to woman's merciful instincts and tender care is added the advantage of scientific training. Truly, there has never been a time when man, while ailing, could have as many things done for and to him as at present. The principal drawback is that the costliness of these advantages is so great that ninety per cent of the people are excluded from their benefits. Not alone in money (although the \$25-a-week nurse must be worshiped from afar by the man whose weekly wage does not reach at least twice this sum) but in time of absence from labor. For these beautiful modern methods require time for their rather tedious applications, and few of the community can spare so long a period from their bread winning.

For these reasons the main-stay of remedial treatment will always be the administration of drugs. The trust-magnate may fritter away month after month at a sanatorium while his constipation is being treated by massage, vibration, electricity, diet, or even by surgical intervention, but the ordinary man must be content with "a cent's worth of salts" that does not take a minute from his working and earning time, but

*Presidential Address delivered before the Tri-State Medical Society of Iowa, Illinois, and Missouri, at its 14th Annual Meeting, at Galesburg, Ill., June 26th, 1906.

Of four articles on our table entitled Pneumonia each described a different disease, and my own a fifth.—Birchmore, *Med. Exam.*

Birchmore is trying hard to have the various forms of pneumonia properly distinguished that we may know "where we are at."

LEADING ARTICLES

unloads his gut promptly. Moreover, in our enthusiasm for new methods we are apt to overlook the fact that the application of these expedients is strictly empiric. When any one of these new "methods" has been devised it is at once presented to us as a means of treating disease, but we know absolutely nothing as to its remedial powers, and the indications for their employment.

Not all the knowledge of a Franklin could inform us what would be the effect of any electric current upon any of the human organic functions, healthy or diseased; we ascertain these by the sheerest experimentation, absolutely blindly, and deduce effects from our observations. Can anyone tell me today whether the x-ray stimulates or sedates the cutaneous epithelium, or the effect it will have on the excretion of bile, unless he or another has ascertained this by direct trial? Without seeking in the least to discourage or detract from the work that is being done along these lines, we must point to the fact that these indirect therapeutic measures can not form a complete and sufficient system of treatment, being too expensive, too tedious, too uncertain and too empiric, for modern needs. *Drugs must still continue to form the foundation of therapeutics; but it must be better drug therapy than that of the past.*

Whatever doubts we may have had upon the subject before the late Boston meeting of the A. M. A., we returned from that assemblage newly impressed with the fact, for which we have long been contending, that the old therapeutics is dead, dead as a doornail (already malodorous) and the sooner it is buried out of sight and smell the better. Tried and found wanting; tried and retried for century after century; worked over by many successive generations of physicians, it has finally bred nihilism and pessimism in the

The relief of engorged portal circulation by mercury deserves a place among the therapeutic certainties.—Neal, *Med. Era*.

profession and resort to quackery and self medication on the part of the public.

The conviction is unmistakably universal that in the therapeutics based on the old uncertainties there is little worthy of consideration on the part of any physician proficient in modern science. In this great concourse, as usual, we found that attention was monopolized by surgery and other mechanical applications, the indirect therapy above described. A small group of men who have been engaged in teaching the ancient galenic pharmacy still cling to it from habit, but the offerings in this line were so small and so sterile as to be inconspicuous. The section specifically devoted to Pharmacology and Therapeutics was filled up with papers on the x-ray, and kindred uncertainties which seemed to have overflowed from their proper departments, those of theory and experiment, into this which should have been devoted to the elucidation of practical demonstrable fact.

The futility of all this is glaringly apparent. The profession has deserted the old therapeutics and will not go back to sift that mass of cinders. The public has only contempt for it, and turns with avidity to any and every form of quackery that offers a relief from the old nauseous, uncertain and inefficacious messes. The slogan of each new brood of expediential charlatans is abuse of all drug medication; and as these parasites are not to be suspected of being in business for their health, we may rest assured that they abuse drugs because they find a ready response in public sentiment.

Holmes said that if all the drugs were swept into the sea it would be better for man but bad for the fishes; and this bit of exaggeration has been taken for Gospel truth, both in and out of the profession, and repeated in numberless modifications until it has become as firmly implanted in the

Frissell has isolated a coccus which if not the specific cause of rheumatism has at least a special affinity for the joints.—*Med. Record*.

public consciousness as the plumber's diamond and other standard and likewise pitiful jokes. So with the at-one-time-jocular allusion to the experimental doctor who kills his patient instead of curing him—it has passed into the field of actual belief in the public mind, a lamentable fact which must be recognized.

Progress moves in lines that may not seem always desirable to us, but it moves nevertheless. The Latin of Cicero and Horace was certainly superior to any that followed the Augustan era, but each generation saw a change until from it the present and more utilitarian Italian has been derived. Modern Greek assuredly has nothing to commend it to the erudite reader of Plato and Aristotle, but this is the Greek that is spoken today. Only the Hebrew has crystallized and remains unaltered during the ages, but this is because the language is dead and not now employed as a means of human intercommunication. Life necessitates constant growth and change, progressive evolution even when that may seem undesirable to those in the arena of the present. No movement has ever succeeded in turning back the currents of human movement, of progress, without sapping the vitality of the race. The inquisition sought to stay the workings of the human mind in what seemed to its organizers to be undesirable directions, and the intellectual and material deterioration of the nations where it succeeded was the result.

It is but natural for a physician to have confidence in the drugs he has learned to use well, and from which he has obtained good results. We are far from condemning so natural a tendency, in which we all share, including your speaker. But this conservatism is the chief obstacle in the way of progress, since it arrays our sympathies against improvement. We believe that it is

impossible to resuscitate the old *materia medica* and with it win back the people; for its known uncertainties, the reason for which has now been clearly demonstrated, compel us to acknowledge its absolute inutility. Science is built only on demonstrable certainty and galenical therapy is guesswork in the extreme. Recognizing and acknowledging this fact we may ask where are we to find the better means and methods that will enable us to retrieve our losses in the only possible way, by doing better work?

One of the most brilliant successes of modern medicine is antitoxin; but unfortunately it stands as yet alone. Desirable as the development of other sera may be, we are not compelled to stand still and do nothing while we are awaiting their development. Disease remains actively at work, and patients demand active and efficient intervention from us. We cannot afford to put away, or dishonestly meet such appeals with lying, impotent placebos and uncertain drugs. We must *do*, and doing must "do" intelligently and effectively.

To get results and avoid doing harm, let us lay down the following rules: (1) Know your drug, that it be exact and true, never variable. (2) Know what you are using it for, whether as a symptomatic specific (curative), palliative, or placebo. (3) Give it uncombined if possible, though to this rule there are many exceptions. (4) Use an efficient preparation and continue it till something happens, either the desired effect or some toxic manifestation. How shall we accomplish this? The way is blazed, but the forest on either side is still a network of uncertain trails, ways leading nowhere but still blindly followed by the unthinking and unsatisfied who daily sacrifice to the mossgrown idols of the past, refusing or neglecting to go the better way.

Knopf says tuberculin causes the same reaction in syphilis, actinomycosis and anemia as in tuberculosis.—*Med. Record.*

Gould says uricacidemia usually means eyestrain; and fits glasses to cure many different diseases.—*Med. Record.*

For these many years the writer has labored to present to the medical profession the absurdity of using the indefinite, variable and uncertain vegetable drugs in their galenical preparations, when their active principles are so much more certain, uniform and reliable. We have never claimed, as our misrepresenters say we do, that the active principles should or may be used to the exclusion of all other medicinal therapeutic agents. Far from it! All we have ever claimed and all we claim now is, that, when a plant possesses an isolatable active principle—be it alkaloid, glucoside, neutral principle, resin, oleoresin or volatile oil—representing its virtues, or a definite, demonstrable and useful virtue, that that principle should be used in preference to the crude drug or its galenical preparations in which the active principle or principles always vary in percentage content. We have presented argument after argument, we have brought proof after proof, we have given fact after fact, and light is unquestionably breaking. There is no certainty except in certainty itself.

From numerous foreign and domestic sources, utterly independent of and perhaps even unaware of our propaganda, we have collated and published indisputable proofs that crude drugs differ very widely in their percentage of active principles or alkaloids. We have shown that some fluid extracts of one manufacturer were ten, nay, a hundred times stronger than fluid extracts of the same drug of another manufacturer, that fluid extracts of the same manufacturer differ 50 to 400 per cent in strength. We have shown that tinctures of some of the most potent drugs, such as aconite and colchicum, were often utterly inert. We have shown that many drugs contained antagonistic alkaloids, that those alkaloids were present in varying proportions at different times and that it was absurd to expect

Bruce assigned general paresis to poisoning by bacterial toxins absorbed through the gastrointestinal mucosa.—*Med. Record.*

constant or uniform results from the administration of them.

We had a conversation with a prominent pharmaceutical manufacturer some time ago which was significant in many ways. Discussing the standardization of fluid extracts I said: "Why, when you have extracted your clean alkaloids and other active principles, do you put them back into the useless, encumbering, decomposable, nauseating dirt?"

He replied: "Because you doctors insist on having it so. You are accustomed to prescribing medicine in that form, and do not want to change. Half of you judge the strength of a medicine by its thickness and the rest by its color. If you want to pose as a reformer and have enough money outside to pay living expenses go ahead. I am in business to sell goods, such as people will buy, and as long as I supply better goods than my competitors, *so long as I get the business*, I am satisfied, even though I know very well, *as I do know*, that you are perfectly right. When medicine has been educated up to the level of pharmacy we will supply you every active principle yet discovered, in chemical purity."

So far as he dares—and a good deal further than he tells—the intelligent manufacturer has already adopted the alkaloids as a standard. He makes his elixirs of cinchona from the cinchonic alkaloids and colors them to imitate your beloved dirty galenics; his wines of nux contain the true active principle of nux, in definite quantity, and none of your uncertainties, decompositions and nauseants.

And the pity of it goes further: As long as the profession contents itself with the mixed principles in plant products and with the *mixed-and-never-certain results* following their use, progress stops. We see that there is truth in the contention that not

Robertson has detected a diphtheroid bacillus in general paresis, in the bowel, lung and brain.—*Med. Record.*

all the effects derived from coca are represented by cocaine. The chemist has acted on this, and discovered a second active principle in coca leaves. There the matter stops. There is no demand for this principle, and it is not put on the market; and the opportunity of ascertaining whether the marvels told by the early Spanish observers had some truth in them, and of securing such a marvelous agent for our use, is lost until someone takes it in hand. Many groups of alkaloids have been discovered whose actions differ in various degrees, just as the pictures presented by various cases of the same disease differ, and a most enticing field for therapeutic application and study is open before us. The door stands wide, but on the threshold the dust lies thick, and across it stretch the spider-webs of habit, apparently of toughened steel but really of gossamer tenuity when the man of resolution essays to brush them aside.

And yet, this is the way to medical fairy-land; to the enchanted region where doubt and perplexity cease to furrow the brow, where the calm consciousness of power based on knowledge sits as a crown on the physician's head, where peace and confidence enter with him.

Are there not among the thousands to whom this message goes some who will feel the impulse to take up this work, to insert their strong shoulders under a corner of the weight, and infuse into the movement the vitality of fresh blood?

"Coming down to brass tacks," you say, "just what is it you want?"

We want you to know and use the well-known alkaloids and other active principles, then to call for and help us to study the rarer alkaloids, those that have been recognized, their general characteristics determined, so that we know they "resemble" strychnine, or atropine, or quinine, or some other well-

known alkaloid, or digitalin perhaps, though no one has as yet taken the trouble to try them out in practice and determine in what cases they are better than the generally used agents of their groups. The cook knows more than to use black pepper when red is better, or allspice when cloves or cinnamon or nutmeg or cassia would be preferable. Can we not have equal nicety in applying our drugs to the needs of the human body?

The tide of quackery and self-medication with flaunted nostrums and worse known galenicals, which is taking from the profession its glory and its dollars to the detriment of humanity as a whole, can never be successfully stemmed except the profession adopt and believe in and hence optimistically and successfully apply a dependable, controlled therapy, and until the doctor demands of his manufacturer of choice that he cease to prostitute his facilities to and besmirch medicine and pharmacy by manufacturing for the price the very things with which the quack and the charlatan delude and dope the people, to the detriment of all.

Let me state as my profound belief, after studying quackery in all its aspects for years, that its existence has a tangible, easily comprehended reason, and that that reason is little creditable to ourselves. If the profession is poor, if the doctor finds it yearly more difficult to make both ends meet, to provide himself with the needs of an up-to-date practice, if quacks multiply and the public accepts and enriches every new one, however absurd may be his claims, whose fault is it? It is our belief that the whole matter may be summed up, by saying that the therapeutics of the regular medical profession is not good enough to meet the requirements of the present day. It is this miserable, outworn therapy that my colleagues and myself are earnestly and

Symptoms of general paresis followed inoculations of cultures in animals of the bacilli from paretic patients.—*Med. Record.*

Robertson says paresis is contagious to persons weakened by syphilis, alcohol and excessive nitrogen.
Med. Record.

with all our hearts and might, endeavoring to help and interest you to reform.

"Well," you say, "what is the matter with our therapeutics, anyway. Boil it down." It is uncertain, inefficient, wrongly directed, unpalatable and crude, antiquated, and in a word unscientific. Let us take up each count of this indictment:

Uncertainty.—It is scarcely necessary to expatiate on this point. The writer has seen a man with dilated heart die within an hour after taking a dose of fluid extract of digitalis that happened to be weak in the cardiac tensors and rich in the cardiac depressant, digitonin. He has given jaborandi to increase a mother's milk and had the drug dry up the secretion entirely, because it was weak in pilocarpine and rich in jaborine. Even with cinchona, whose alkaloids are phenomenally synergistic, we have all practically dropped the cruder preparations for quinine. How much more necessary this is with plants that contain antagonistic principles. I will only allude to hyoscine, which is completely smothered by the accompanying atropine except in some rare specimens of hyoscyamus; arbutin, which is accompanied in *uva ursi* by thirty-five times its weight of tannin, so that effective dosage was unknown until arbutin was separated and administered alone, as recommended by the writer some years ago and as now used by the awakening profession with almost marvelous success.

But I must speak of the alkaloids of hydrastis: Berberine contracts relaxed connective tissue, while hydrastine contracts the smaller blood-vessels, especially of the uterus. The former is a much-needed remedy for dilation of the stomach, for uterine, gastric and intestinal ptosis, for all relaxed states of ligamentous tissues. Hydrastine is a useful remedy for menorrhagia and especially metrorrhagia. The man who

From hearing many papers in many society meetings we are ready to comprise modern therapy in four words—wait for the serum.

administers preparations containing both when but one is indicated, loses much of the satisfaction that comes from an intelligent practice of medicine. In a word, there is in the crude preparations uncertainty as to the nature as well as to the degree of effect we are going to get, whereas with the active principles we have certainty as to both.

Inefficiency.—When we have to wait for our medicinal principles to be dissolved from an encumbering mass of inert substances, when we are uncertain as to the kind and quantity of effect that will follow, we are paralyzed as to the prompt and effective intervention at the beginning of an attack that is indicated, and that alone would prove capable of breaking up the malady before it had become firmly seated in the tissues.

Consequently, our attitude toward the patient tends to become that of a benevolent spectator, instead of powerfully and intelligently intervening and becoming the controlling element in the situation. Sureness we must have to act with power; and sureness as to our drugs gives us the first firm footing for success.

Wrongly Directed.—Here we come to the crux of the matter. We have been directing our attacks against diseases as entities, when there are no such things. Leaving out the influence of quinine over malaria, mercury over syphilis, and where have we a third instance of a specific for any disease? We are, in truth, not called on to treat diseases, but conditions. No matter what may be the disease we must recognize the presence of autotoxemia, and remedy it; of hyperpyrexia, and quell it; and if we are qualified, of disturbances of the vasomotor equilibrium, and correct them. Well were it if we did away with these things—the prescription books, the ready-made reme-

In whom does a cold draft determine a coryza, a bronchitis? Especially those whose health is altered.—Bouchard.

dies for single diseases and the belief that a name-diagnosis is an essential preliminary to drug-treatment.

Here is how we get wrongly started in our work; we see a patient; wait some days till able to make a name-diagnosis—eight days for a Widal—and then turn to our formula collection—select the one that has the biggest name behind it, or contains the most ingredients, and give it throughout the attack. If we construct our own prescription we select the remedy we prefer; not knowing just what it will do we throw in a few others, any one of which may hit the case, and "let her go at that." Witness Hare's prescription for asthma—belladonna, hyoscyamus and stramonium. Each contains in varying proportions atropine and hyoscine, the latter usually in hopeless minority, but mayhap, in almost lethal majority so that the effect of the whole, as a rule, is that of atropine minus hyoscine. Why not give what atropine we need at once, or hyoscine, if indicated.

The difficulty is that dependence on formulas leaves us at the mercy of the manufacturers who promote so-called specific remedies for specific diseases; and abdicating our functions as prescribers we follow the lead of patent-medicine makers—the more fools we.

Instead of this, our attack should be directed against just what we see to attack—the symptoms present. We have fever—moderate it; we treat what is to treat, and study our cases instead of our books. We do not wait for a name-diagnosis, but make a condition-diagnosis on which we base our therapeutics. We cannot stop to ascertain what is the cause of hyperpyrexia, because before we can do this our patient will be dead—we just apply ice and cool him off, then we hold an ante-mortem instead of a post-mortem to complete the diagnosis. This we term condition-therapy.

During March the average age of the 67 citizens of Santiago, Cal., dying was only 64 years. A fossilizing climate.—*Med. Record.*

Unpalatable and Crude.—Because we administer uselessly a lot of inert woody fiber, cellulose, gum, sugar, resin, pectin, albumen, coloring matter, tannin and other ingredients of the plant, which add no useful element to the dose but make it larger, more unpleasant, slower to act, less likely to be retained by the stomach, and materially interfere with the absorption of the active principles present.

Antiquated.—Here is our final point. The basis of scientific therapeutics is the known action of remedies. This has been ascertained mainly through the medium of physiologic experiment; and this is of necessity confined to the definite, uniformly-acting active principles, because certainties can not be deduced from uncertainties and the experimenters were driven perforce to these agents. It results that we have concerning them a wealth of information, reaching down to the minutest details, that enables us to prescribe them with full knowledge of the effects to be expected.

The active principles are not substitutes for the tinctures and extracts, but each has a therapeutics of its own. Each stands on its own merits. They may resemble the crude drugs, but this is incidental. Study the alkaloid for itself, without reference to the parent plant. Of what possible consequence is it to us whether hyoscine comes from henbane or from scopolia? Or what these plants were used for in the earlier day? We give hyoscine for its own powers, as shown by scientific experiment and nothing else.

In the W-A Text Book of Alkaloidal Therapeutics there are 155 remedies described; but there are far too few. Many alkaloids are known to the chemist but not yet tested for the physician. There is a whole group of tetanizants of which strichnine is the type, embracing brucine, the-

The Primate of Ireland with bishops and canons support a new secret quack method of treating drug habits.—*Med. Record.*

baine, laudanine, gelsemine, calabarine, curarine, all having similar effects—but not necessarily identical. They have not been studied yet, except that we know brucine is a mild tonic and a local anesthetic, and that thebaine has shown powers in certain cases of paralysis superior to those exerted by strychnine. We are convinced that a thorough study of this group would show valuable diversities in the powers of the different members that could be fitted to like diversities in the symptoms of diseases.

The great need is for clinical observers who will apply these agents in practice and note the results. The function of the medical press is to scan the literature of the world, and when any agent is discovered which seems worthy of trial, gather together all available data as to its properties and present them to you. But it is up to you to put this data to the test of actual practice, and to verify or refute the statements presented. Without your participation this work remains untested and uncertain. For instance: There are two agents that have acquired repute as remedies for symptomatic epilepsy—verbenin and solanine. The former has been studied by Prof. French and others, and used to some extent by ourselves. Its action is still obscure though it possesses distinct merit. Solanine has been shown experimentally to admirably replace the bromides, sedating nervous irritability without disordering the digestion, producing acne or destroying the sexual function as large doses of bromides do. Besides, it can be administered in a few little granules and affords all the benefits derivable from the largest doses of the bromine salts. The advantages are so great that we do not see how any physician can afford to disregard this new remedy; but we must have reports from hundreds of clinicians to fix the true status of the drug and the limitations of its

applicability. Without your cooperation our results are fragmentary. With it we will reform medical practice.

The writer and his associates have given many years of earnest work in the endeavor to arouse an interest in purely scientific, purely ethical, non-secret, non-monopolistic therapeutics. The alkaloids form an important part of this, but they are by no means all. Many synthetics are as strictly scientific as they. If we have had little to say of them it is because, being backed by commercial interests, they need no aid from us; in fact, the energy with which they are pushed leads to the danger that equally deserving if not better remedies, without such backing, may be pushed into the background. This being our work, our most earnest endeavor, we are glad to be able to say that, as we see it, results are highly satisfactory. The profession at least shows signs of awaking to the importance of this movement—the need of reform in therapeutics is universally admitted. The scope of our work is being better comprehended. The cry of "commercialism" is silenced. It is at last admitted that we can tell the truth and yet be financially interested in the results from the telling. It is an absolute necessity that there should be a source of standard supply for these delicate instruments, or the propaganda would be emasculated. Of what possible use would it be for us to recommend strophanthin, and send the physician out for it into a market whose supply varies in strength from one to ninety. When a non-secret, non-monopolized remedy or line of remedies is advocated, which every druggist, every physician, may prepare and dispense if he chooses—and if he has the ability and the facilities so to do—the cry of interested motives loses point and is only perpetuated by those whose interest it is to perpetuate error. The only opposition now manifested

Jelks of Memphis treats amebic dysentery by flushing the colon with formalin-boric acid solution, then oil and bismuth.—*Med. Record*.

Even the Christian scientist rose to the opportunity and a St. Louis church of that sort collected \$1923 for San Francisco sinners.

against the alkaloids comes from men who supply ready-made prescriptions and uncertain galenicals to physicians, and who find their sales decreasing under our advice to physicians to study their cases, and do their own prescribing, yes, dispensing, with drugs they know all about—and of such opposition we are rather proud than otherwise.

We are not contending for the alkaloids, but for drug-therapeutics based on agents worthy of trust, because their effects are sure, uniform, perfectly well known; drugs with no commercial backing, but depending for popularity on their effectiveness and nothing more. And on this basis we ask from the profession a renewal of confidence in such drugs, and a trial of the therapeutic methods based on them; promising in return a renewal of that optimistic faith that moves away mountains of disease.

This may to many be a "twice-told tale;" but it is one that has traveled far and met no serious attempt at controversion. Many of the foremost men of our day have assured us that we are right; and that the only trouble has been that the world required

time to catch up with the thought. But we who are advocating this reform are painfully conscious that it is a thing far bigger than the men now in it; and that at the best we may hope in the future to be known as forerunners and no more. But when the little group of workers who have hitherto sustained this movement, who have been its working center, has been multiplied by hundreds of the earnest awaking profession as well as of the finely equipped youths now being sent out from our medical colleges, when the tremendous significance of this revolution in therapeutics shall have been appreciated and the rich results of modern physiology and pathology shall have become wedded to this new sure therapeutics, then will commence an era in medical practice the like of which has never been so much as dreamed of hitherto.

It's right, it's true, it's psychologic, it's evolutionary, it's coming. Read the handwriting on the wall and don't withhold your hand. We appeal to you, each of you, for aid in this movement.

Chicago, Illinois.

COCA AND COCAINE.

BY J. M. FRENCH, M. D.

ERYTHROXYLON COCA, Coca, or Cuca, natural order Erythroxylaceae, is a small shrub which is indigenous in Peru, Bolivia, Chili, and some other South American countries, growing abundantly on the eastern slopes of the Andes. It is also cultivated in these countries and in Java and the Indies. It grows to the height of from four to six or eight feet, has spreading branches, wrinkled bark of a purplish-brown color, smooth twigs, and ovate, alternate leaves, which are dark green above and paler

beneath, one to two inches long, and one-half to one inch wide. The parts used in medicine are the dried leaves, which have a tea-like odor, and a pleasantly bitter, pungent taste.

The leaves of the coca are chewed by the natives of the Andes much as tobacco is chewed in other parts of the world. It has been estimated that it is used in this way by about ten millions of the human race. Taken in this manner its effect is to abolish for the time the sense of hunger, increase the power

Every doctor who decries calx iodata in croup adds that this is always laryngeal diphtheria.—*Med. World*, May, page 177.

There is not and can not be any quarrel between antitoxin and calx iodata; it's a question of human lives, gentlemen.

LEADING ARTICLES

of endurance, and prevent the suffering incident to great privations and excessive physical exertion. Its reputation in this direction is well shown by the following lines of the poet Crowley, in which he represents the Indian "Pacchamma" as addressing Venus thus:

"Our Varicocha first the Coca sent,
Endow'd with Leaves of wondrous Nourishment,
Whose juice succ'd in, and to the stomach tak'n,
Long Hunger and long Labour can sustain;
From which our faint and weary Bodies find
More Succour, more they cheer the drooping
Mind,

Than can your Bacchus and your Ceres joined.
Three Leaves supply for six days' March afford;
The Quitoita with this Provision stor'd,
Can pass the vast and cloudy Andes o'er."

When taken in ordinary medicinal doses, coca is an aromatic bitter tonic, a diuretic, and a stimulant to the brain and nervous system. In small doses its effect is to improve digestion, stimulate the respiration and strengthen the heart's action, and increase the arterial tension and the excitability of the sensory nerves. It increases the blood-supply to the brain, produces wakefulness and a sense of well-being, with a lessening of hunger, thirst, and fatigue. It retards the destructive metamorphosis of tissue, and when used habitually brings about a characteristic degeneration of the nervous system. In large doses it increases the body-heat, and causes delirium, hallucinations, impaired coordination, and congestion of the brain.

Only two galenic preparations of coca are official in the U. S. Pharmacopeia; the fluid extract, of which the dose is from ten minimis to one dram, and the wine, dose one dram to one ounce. There is an eclectic preparation, specific coca, dose one to twenty minimis. The dose of the powdered leaves is from ten grains to a dram. The most important active constituent of coca is the alkaloid cocaine. This may readily be decomposed into several other constituents, the chief of

It will pay the doctor to keep a stock of tinctures, extracts and especially active principles, and dispense.—*So. Clinic.*

which is egonine. Various other less important alkaloids are also present, especially cocamine, isococamine, homococamine, and homoisococamine. The leaves of the Java coca also contain tropacocamine. Good samples of coca should not contain less than .5 per cent of the combined ether-soluble alkaloids.

COCAINE.

The alkaloid cocaine was discovered by Neuman in 1859. It did not attract any great attention, however, until 1884, when its remarkable properties as a local anesthetic were brought to the attention of the profession by Koller, and it at once came into prominence. It has the chemical formula of $C_{17}H_{21}NO_4$. It exists in the leaves in very small proportion, usually from .02 to .04 per cent. It is soluble in about 600 parts of water, 5 parts of alcohol, 3.8 of ether at 77 degrees Fahrenheit, and is very soluble in chloroform. The hydrochloride occurs in colorless prisms or as a white crystalline powder, having a slightly bitter taste, and producing a tingling sensation on the tongue, followed by numbness. It is soluble in about one-half part of water, three and one-half of alcohol, three of glycerine, twenty of chloroform, and is almost insoluble in ether and oils.

Physiological Actions.—In frogs, small doses of cocaine produce increased movements, exaggerated reflexes, and sometimes convulsions, which, if the dose is sufficient, are soon followed by depression and paralysis of the sensory nerves and the posterior columns of the spinal cord, while the peripheral nerves still maintain their activity. In dogs, cats and rabbits, the symptoms are those which indicate stimulation of the central nervous system. At first there is great restlessness and irritability, afterwards irrational excitement, finally convulsions, unconsciousness, coma and death from asphyxia.

It seems that attacks of erysipelas may be prevented by small and repeated doses of sodium salicylate.—*Lancet.*

In man, the most important effects of cocaine are produced upon the central nervous system and the sensory nerves. Its primary action is that of a gentle stimulant, and in small doses this is its principal action. It stimulates digestion and respiration, increases the heart's action and raises the arterial tension, augments the irritability of the sensory nerves, promotes the flow of blood to the brain, causes wakefulness and increased mental activity, and lessens the sense of hunger and of fatigue. It increases the amount of water thrown off by the kidneys, but by checking the retrograde metamorphosis of tissue it lessens the waste, according to most authorities, although one observer reports a notable increase in the excretion of uric and phosphoric acids, with an increased exhalation of carbonic acid from the lungs. Its secondary effect is to increase the peripheral circulation, flush the surface, and raise the body-temperature, at least upon the surface. It also dilates the pupil, and this occurs whether it is applied locally or taken internally.

When large doses are taken, the primary stimulant effects are fleeting and the heart and respiration quickly begin to show signs of embarrassment. The pulse becomes small, rapid, and intermitting, and the heart seems at intervals to stand still in systole. The respiration is slow and shallow, with a sense of tightness across the chest. The skin becomes cold and clammy, the blood-pressure falls, and the man has a sense of impending dissolution. The cerebral activity is depressed, and there is somnolence and lessened power or coordination, with marked hallucinations and delirium. If the dose is a lethal one, the paralysis extends to the motor ganglia of the heart, the posterior columns of the cord, the sensory nerves, and the respiratory centers. Death ensues from paralysis of the respiration. These symp-

toms so closely resemble those produced by the fluid extract of coca, as to make it evident that cocaine well represents the coca plant as a whole.

Alarming symptoms have been produced by the hypodermic injection of as little as 1.8 grain of cocaine in susceptible persons. Myrtle reports that he dropped three minims of a three per cent solution into each eye, when at once the patient experienced a sensation of numbness in the back of the tongue and throat, with palpitation, and threatened syncope and nausea. Whistler, after the application of a four per cent solution to the nasal cavity, noted vertigo and threatened syncope. Rickett's patient, after the use of a similar solution in glossitis, became moribund. Baker mentions a case in which the injection of one grain into the gums by a dentist produced death in a few minutes.

Van Renterghem thus describes the effects of his experiments in testing the action of cocaine in his own person:

"Between noon and four p. m., he took ten doses of Merck's pure cocaine, each of ten centigrams, about 1.5 grains. The drug was allowed to dissolve in the mouth, that the local effect could be studied at the same time. During the four hours, he took 870 milligrams of cocaine, or about 14 grains. After the second dose he felt no longer the slight tendency to sleep which had ensued after a bad night. After the third dose an agreeable sensation, like that of slight alcoholism. Cerebral activity ensued, he worked with pleasure, thoughts followed each other quickly, the judgment was more prompt. The humor was gay; he felt benevolence for all the world. This state was maintained throughout the experiment. After the seventh dose he perceived an agreeable warmth, the face was red, the pulse was accelerated, the respiration normal. He

Don't overlook the fact that electricity, x-ray, radium are in the beginning strictly empiric methods; yet have great value.

No one as yet has prescribed x-ray, etc., from a known power it possessed over pathologic processes.

felt the desire to talk without cessation, and to be in movement. He felt the capacity to lift great weights. These symptoms lasted three hours after the last dose, then gradually subsided, so that by 11 p. m. in the evening everything had returned to the normal state. At noon the pulse was 74, the temperature 37.4° C. in the armpit; when the last dose was taken, pulse 110 to 120, temperature 37.4° in the anus, 37.9° under the arm. At 11, when retiring, temperature under the arm 37.4°, pulse 76. During the evening, which was passed in the theater, he felt no exhaustion, no fatigue. Dining at 4:30, he felt no hunger, but ate mechanically as was his custom. The loss of taste may have explained this. He would have been as well satisfied to miss the meal. Digestion was good. No effect on the stools or the urine. Retired at 11:30, after a light repast, and passed a good night. At the moment of retiring he felt head a little contracted, slight indication of aching in the forehead, above the eyes, and at the vertex. Next morning this lasted till noon."

The local action of cocaine is that of an anesthetic. This effect is produced through its paralyzing influence upon the terminations of the sensory nerves. It must be noted, however, that this action is not manifested alike upon all nerve-filaments, but is shown especially upon those which convey the impressions of pain and touch. The exact researches of Kiesow have shown that sensations of heat and cold are recognized as readily in the cocainized as in the unaffected parts of the body. Cocaine applied to the tongue causes it to lose the taste of bitter substances, while sweet and sour liquids only partially lose their taste, and salt is recognized as readily as usual. When applied to the nasal mucous membrane it loses the sense of smell entirely. Insensibility to pain and touch may be induced

in any of the mucous membranes of the body that can be reached, by absorption through simple contact. It is scarcely absorbed through the unbroken skin, but may be introduced by cataphoresis. The deeper structures may be anesthetized by hypodermic injection. In whatever way it reaches the nerve filaments, it blanches the tissues and produces a profound but temporary anesthesia. The blanching or pallor of the membranes points to the action of the drug upon the vasomotor nerves, and through them upon the walls of the vessels.

Cocaine was first introduced into medical practice as a local anesthetic in diseases of and operations upon the eye, and it is still more frequently employed here than in any other part of the body. Along with the local anesthesia it produces contraction of the vessels of the conjunctiva, followed by dilation of the pupil and partial loss of accommodation. The symptoms of local anesthesia come on in from one to three minutes after its application, and last from five to fifteen. The dilation of the pupil appears in ten or twenty minutes, and lasts hours, or it may be a whole day. Solutions of one and two per cent are strong enough for use in the eye, while the strength of hypodermic injections should vary from two to ten per cent.

When injected into the spinal canal, cocaine acts as a remarkably efficient general anesthetic. One-fourth of a grain injected by this method produces complete anesthesia of the lower extremities in ten minutes, and of the upper portions of the body in twenty or thirty minutes, and lasting from one to four hours. The consciousness is not affected in any way. This method of employment has had unpleasant effects in some cases, and is not free from danger. Profound collapse has frequently occurred, and fatal results have followed in a few instances.

Massage is an exception to the empiricism of mechanic therapy, since we know the effects on tissues.

Would you pay 50 cts a year for a luxury appreciated every day in it? Get a packet of true Japanese bamboo toilet paper.

Tropococaine has been used for the same purpose, and according to the verdict of experience, is equally efficient and much safer, though requiring somewhat larger doses.

The cocaine habit is a most seductive and dangerous one, and for a number of years after the general adoption of the drug as a local anesthetic in 1884, its use as a habit-drug rapidly increased, until the *British Medical Journal* declared that it was the third great scourge of the world, alcohol and opium being the first and second. Judging by the relative importance given to this subject and the report of cases at the present time as compared with ten or fifteen years ago, there would seem to be ground for hope that its use is now decreasing. Crothers states that cocaine takers are usually past thirty, and that the most of them have taken alcohol or opium or both with other drugs for their effects before cocaine was used.

Very few persons become cocaine users without previous addiction to drugs of some kind. Many cases are those of invalids who use bitters and secret drugs for some real or fancied trouble, and who find a panacea in cocaine, and soon become addicted to its use. A large proportion of its victims are professional men. Some persons begin its use for the relief of diseases of the throat, and catarrhal affections; others use it to relieve the depression and nervousness following the use of spirits, and to cover up its effects. A physician's prescription containing cocaine has in some cases been followed by such marked relief as to demand its continuous use. Seldom, if ever, however can a case of cocaine using be traced to its use in a surgical operation. In a Connecticut village a prescription for cocaine in catarrh became so popular that at one time there were nearly one hundred persons

using it. Then its contents became known and its use was forbidden. At least four of these persons became cocaine habitues.

However the habit is acquired, it is damning in its effects, and more rapidly destructive to the moral nature of the user than is that of any other known drug. It is therefore very desirable that the physician should be on his guard against its specious effects.

Some years ago, while conducting a sanitarium for the treatment of drug addicts, I had under my care a physician of ability and experience, who to a long-standing use of morphine, had added that of cocaine, a habit which he claimed to have acquired from using it as a spray for an irritable throat. He confessed to experiencing a greater degree of euphoria from the use of cocaine than from that of morphine, but claimed that it was much less difficult to leave off, he having several times stopped its use without any serious difficulty. Apparently the difficulty lay not in stopping, but in keeping stopped. Indeed, this seems to be characteristic of the drug, that while it may be temporarily abandoned with comparative ease, there is a peculiarly strong temptation to return to its use for a long time afterwards. This extreme seductiveness constitutes one of the greatest dangers from the use of cocaine. It is very treacherous. No one thinks he is a slave to it until his bondage is absolute. Waugh cautions physicians never to give a patient cocaine in such a shape that he will know what he is taking or be able to supply himself with the same drug without the doctor's aid. He adds that no man knows whether he is safe from the allurements of the drug until he has tried it, and when he has made the trial he cannot stop it if he is one of that class who would prove liable to the habit.

There is nothing that the cocaine addict will not do to get the drug. He has no shame,

Five alkaloids have been found in angostura. Query: Were they only created to supply flavor to cocktails? Try them.

Pavesi found a new alkaloid in *Papaver Dubium* naming it aporeine. It belongs to the thebaine stimulant group.

no moral sense, no feeling of responsibility to God or man, no care for his family, no religious principle, no regard for truth, honor, or virtue. His soul is dead.

In his work on "The Diseases of Intemperance," Crothers gives the following clinical picture of the effects of confirmed cocaine addiction:

"Patients who use cocaine alone—and those who have endeavored to wean themselves from morphine by its aid, and so added cocaineism to the morphine habit—appear marasmatic. The skin is of a pale yellowish, almost cadaveric tint, and withered feel. The extremities are cool, and covered with cold sweat. The eyes are deeply sunken, glistening, and surrounded by a dark ring; the pupils widely dilated. Appetite is lost, digestion disturbed. Salivation, with dryness of the throat, may be complained of, and further, partial sensory disturbances or total analgesia. From the paralyzing action of the cocaine upon the bloodvessels, patients complain of palpitation and breathlessness; troublesome sweating and noises in the ears, and also syncopal attacks and dyspnea. The pulse is more frequent and easily compressible. They suffer from a want which must be satisfied. They become nervous, trembling, and fall into a wretched condition of neurasthenia. Speech is disconnected and can hardly be understood; impotence and incontinence of urine may appear. Sleeplessness sets in early. One of the most characteristic effects of this habit is the occurrence of muscular twitchings, tonic and clonic convulsions, and finally epileptic attacks in which the patient may die. The mental symptoms take the form of hallucinations, usually of general sensation, but not infrequently of sight as well. General mental weakness may set in rather early, to be observed in loss of memory, and unusual prolixity in conversation

Much harm is done by bleeding too little, but seldom by bleeding too much, is a true remark.—Eights' address, in 1832.

and correspondence. When the drug is withdrawn, besides the vasomotor symptoms, there may be seen depression, impairment of will-power, weeping, etc. The chronic form does not protect against acute intoxication."

Another peculiar hallucination which is almost characteristic of cocaine using, is the sensation of worms or other parasites under the skin. Patients are continually examining the skin for them, and can hardly be persuaded that they have no real existence.

Although less rapid and deadly in its effects, the same general symptoms are produced by the habitual chewing of the leaves of the coca plant. In Peru inveterate consumers of coca are known as coqueros, and are recognized by their unsteady gait, lax, yellowish gray skin, lack-luster eyes surrounded by brown rings, tremulous lips, incoherent speech, stupid and apathetic condition. They are suspicious, hesitating, false, and cunning. The signs of old age appear before middle life, and if they survive, imbecility results.

Therapeutic Uses.—The legitimate therapeutic uses of coca and cocaine can nearly all be included under three heads:

1. For its primary stimulant action on the brain and nervous system. For this purpose the crude drug and its galenic preparations are more largely employed than is the alkaloid. As has been stated, the natives of those regions where coca is indigenous, chew the leaves for the purpose of increasing their powers of endurance, and enabling them to go for a long time without food. In ordinary medical practice, the use of the drug for this indication is not large, being limited by a realization of the danger of the formation of the cocaine habit.

As a cardiac stimulant in pneumonia it may be given in doses of grain 1-6 every six to eight hours, alternated or combined

Maurice Packard says cocaine is a better antidote to morphine than is atropine. Give cocaine every half hour.

with the proper dose of strychnine. In vomiting of various sorts, especially that caused by gastric ulcer and hyperesthesia, and in gastralgia, it is used in doses of 1-67 grain every fifteen minutes until effect.

Ellingwood recommends the specific tincture in doses of from one to twenty minims, in neurasthenia, morbid depression of spirits, nervous irritability, reflex nausea and vomiting, nervous headaches, hemorrhoids, asthma and as an anaphrodisiac and an emmenagogue.

2. For its local anaesthetic action. Here the agent used is the alkaloid cocaine. Applied in the form of an ointment, the oleate of cocaine affords great relief in many painful conditions, such as piles, anal fissures, burns, boils, irritable ulcers, and general pruritus.

In aqueous solution of from one to four per cent, applied to the mucous surfaces of the body, it is useful in a multitude of painful conditions. A four per cent solution dropped into the eye renders it insensitive to pain, and in this condition it may be freely operated upon. Injected into the urethra, it renders the membrane insensitive to pain, and also aids in shrinking the tissues. For these uses I have found it helpful in old men suffering from enlarged prostate, when it was necessary to catheterize them.

It is used as a douche in the nasal passages, as a spray in both the nose and the throat, and as a wash for any mucous membrane. Many persons form the cocaine habit from using it first for these purposes, and hence great care should be taken to guard against the formation of such a habit, even to the extent of avoiding the use of cocaine whenever there are other agents which will answer the purpose nearly as well.

For performing minor surgical operations, Schleich's formulae are quite extensively used. He uses it in three strengths,

The American Medical Editors' Association has no official organ, and doesn't seem to need one very much.

strong, normal and weak, as follows: Each formula contains three ounces and three drams of sterilized water, one-half grain of morphine hydrochloride, and three grains of sodium chloride. In addition, the strong solution contains three grains of cocaine hydrochloride, the normal one and a half grains and the weak one-sixth of a grain. One of these solutions is first injected superficially into the epidermis, and then deeper, by fine needles, so as to produce local edema over the entire field of the operation. Very considerable operations have been performed satisfactorily by this method, but on the other hand alarming results have followed in some cases.

3. For its general anesthetic effects. For this purpose it has been employed by surgeons in operations on all parts of the body, and by physicians for the cure of neuralgia, and for the relief of pains in labor and to control the spasms in eclampsia. From 1-5 to 1-3 of a grain in sterilized fresh solution is injected through a long needle inserted between the third and fourth lumbar vertebrae into the subarachnoid space. Tropococaine in doses two or three times as large is preferred by some as being equally efficient and less dangerous.

Milford, Massachusetts.

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One of the reasons we have for urging a study of the alkaloids is that among those not yet utilized there are surely some that might prove of great value. It is evident that between the effects of coca and those of cocaine there is much difference. This can only be due to other active principles in the plant. The effects of cocaine are so disastrous that we do not care to use any galenic preparation containing it. The next step would be a decocainized preparation; but as this would be variable and uncertain in its activity we should have the remaining

In every battle comes a time when both sides are weary of it and the commander who pushes the fight wins it.—U. S. Grant.

alkaloids extracted and presented separately that we might study them. Such studies will only be made as the medical profession

increases its demand upon the chemists. There is here a chance for some ambitious and capable man.—ED.

THE ACUTE DISEASES OF CHILDREN.

BY GEORGE H. CANDLER, M. D.

VI. ERYSIPelas.

ERYSIPelas (Rose Fever, St. Anthony's Fire, *Ignis Sacer*) is an acute infectious disease due to invasion of the system by the streptococcus *erysipelatus*, now deemed identical with the *s. pyogenes*. The same germ is responsible for cellulitis, pyemia, and, possibly, puerperal fever. Just how the bacteria gain access to the lymphatics is not known, but it is probable that some trivial break in the skin or mucosa existed (and few ordinary individuals lack such a lesion) at the time of exposure.

In traumatic erysipelas the inflammatory process starts at and is limited to the parts adjacent to the wound, but in idiopathic erysipelas the face and scalp, or face alone, are nearly always affected. In childhood we find erysipelas to be one of the earliest and most deadly diseases; the variety which presents at the umbilicus of the newly-born being especially fatal. Vaccination is not infrequently followed by erysipelas, though modern methods of operating and improved technic in the manufacture of virus markedly lessen the danger. In traumatic erysipelas the internal treatment recommended for idiopathic erysipelas will be called for, together with the most perfect cleanliness and strong antiseptic (germicidal) applications locally.

The disease is conveyed by contact, fomites and the air. The incubation period is from four to seven days. Perfectly healthy children (or adults) are not likely to be infected. Strumous, poorly fed and un-

clean children, or the offspring of drunken, syphilitic or tubercular parents, are most likely to suffer.

Prognosis.—In idiopathic cases, good (under proper treatment); in traumatic (with which we do not deal here) generally guarded.

A peculiar form of the disorder, *erysipelas ambulans*, in which the inflammation appears and subsides in one part of the body only to reappear somewhere else, may destroy life by exhausting the patient's resistance. Under modern therapeutic measures, however, this form of erysipelas rarely presents.

Symptoms.—Prodromes are not usually noted; when they exist there will be some malaise, chilliness, flushing, tingling of the face, headache and restlessness. More often, however, the disorder is evidenced by a severe chill, followed shortly by fever (102°-105° F.), a splitting headache and, perhaps, pain in the back and limbs. The pulse is full and fast, the tongue foul, bowels constipated and appetite lost; thirst is constant and usually distressing; the urine usually diminished, high colored and after the first day albuminous. A marked leucocytosis is usual.

Locally we find the inflammatory process commencing in nearly every case near the nose (rarely the ear, eye or mouth seem to be the point of initial infection) and spreading thence till the entire face (or one side) is involved; the scalp and neck may be said to form the usual boundaries. However,

Strange that a Boston dentist should discover the anesthetic uses of a drug known since Raymond Lulli.—Fullerton.

Strange that after forty years' wandering in the opium wilderness Tait cures peritonitis with a dose of salts.—Fullerton.

in serious cases the scalp may be invaded—together with the tissues of the neck—and then it is that the disease assumes its most threatening aspect. Old-time practitioners were in the habit of giving up their patient once the inflammatory process involved the scalp. Today we limit the spread of the infection very nearly at will, realizing as we do that the *bacteria exist in the margin of the area affected*, dying out entirely in the central portions. The constitutional disturbances are due partly to the toxins excreted by the bacteria and partly to the derangement of the body chemistry caused by the inherent effort of the system to repel the invading microorganisms.

The skin of the affected parts is red, tense, edematous and glossy and not infrequently *bulleæ* appear. The eyes, nose and mouth are enormously swollen, in some cases to such an extent that the patient becomes unrecognizable. The margin of the erysipelatous area is raised and distinct. Quite often it assumes a ribbon-like appearance. However, there is great variation in the local manifestations. Occasionally the skin reddens but little and *bulleæ* are numerous; again, the skin becomes almost scarlet and intensely edematous, but blebs are almost entirely absent.

In all cases, however, the commencement of the process is at the junction of skin and mucous membrane and its steady progress is apparent towards the neck and scalp, and more or less pain, tingling and burning are complained of. The disease is at its height on the fourth or fifth day; at this time the temperature reaches the maximum height (103° — 105° F.) and signs of delirium may appear. With varying degrees of rapidity the local process progresses until somewhere about this time the erythematous margin ceases to advance and becomes paler, swelling subsides, itching makes itself felt

To avoid autointoxication the five emunctories must be in anatomic and functional integrity, blood, heart and nerves ditto.—Bouchard.

instead of burning and pain, and the temperature declines; desquamation follows the crisis and the patient, about the tenth day, is practically free from distress. Relapses are not infrequent, especially when strong germicidal applications and thorough systemic antiseptics have not been used.

Diagnosis.—This is easily made. The abrupt onset, the high temperature, the commencement of inflammation at a mucocutaneous point, which gradually spreads, presenting meanwhile a distinct raised border, all these features are distinctive. Erythema does not cause high temperature or swelling. Eczema presents an irregular inflamed area which itches intensely, but there is no fever or constitutional disturbance. Dermatitis venenata (*rhus tox* or other local poisoning) may at first be mistaken for erysipelas, but usually the hands and face are both affected (or some other portion of the body presents evidences of the infection) and the raised border of erysipelas is wanting. The systemic disturbances are also either absent entirely or slight. In *rhus tox* poisoning blebs are almost invariably present in large numbers.

Treatment.—Here, if anywhere, the need for local and constitutional antiseptic procedures is evident. The first step is to secure a thoroughly clean alimentary canal, and active skin, liver and kidneys, applying locally meanwhile a mild, cooling antiseptic. This, of course, if we get the case *early*, when the local process has not yet assumed serious proportions.

There is nothing more grateful to the patient (and few things so effective) than a saturated solution of magnesium sulphate (two ounces to the pint of boiling water) applied cold on compresses to the parts; and changed often. Ten to twenty minims of carbolic acid or creolin should be added to the pint of solution before the compresses

A strong suspicion is arising that the *Western Druggist* does not approve of physicians' dispensing medicines. Probably unfounded.

are wetted. This is preferable to ointments or pastes. Carbzenol, ichthiol, etc., may be used from the first with good results; a solution (3 per cent) of resorcin will also prove promptly alleviative.

The writer prefers, however, to use the first named solution until constitutional treatment has been instituted. He orders the epsom salt compresses on at once and exhibits every half hour for six doses blue mass and soda, gr. 1-4, podophyllin, gr. 1-6; two hours after the last dose a saline draught (magnesium sulphate) is taken and as soon as resultant stools have been disposed of a free enema of any good alkaline antiseptic solution is given. The liq. antisept. comp. of the U. S. P. is excellent. Use one ounce of this formula to the quart of water.

Every hour gr. 1-6 of calcium sulphide is given, echinacea, gr. 1 (or ten minims of the sp. tr.) being added to each third dose. Gr. 1-67 of digitalin, gr. 1-134 of aconitine and gr. 1-67 of pilocarpine are exhibited to a child of twelve every hour for three or four doses (or till temperature falls one to two degrees and the skin is moist), then the interval between doses is lengthened to three hours. Smaller doses (in solution) are given at same intervals to younger patients.

At least four times daily ten grains of the triple sulphocarbonates is given in solution —this for the first two days, after that half such doses will suffice. The enema is repeated daily and the blue mass and soda with podophyllin is given every third night; a saline draught is ordered each morning. Here, practically, is the internal treatment of the disease, though if ten drops of nuclein be exhibited twice daily (hypodermatically) the condition is more rapidly and positively controlled.

As soon as we have obtained results from our medication (on the second day as a rule) we begin to control the local infection. The

A Christian scientist convicted of manslaughter in England was found to carry morphine, strychnine and a syringe—for himself.

step to be described will of course be taken *at once* in severe or far-advanced cases. Here delay might prove disastrous and we therefore cut short the local process and then institute systemic medication.

Carefully cleanse the affected area with warm boric acid solution and then with a camelhair brush paint the entire margin—and for an inch beyond—with pure carbolic acid. In one minute neutralize with alcohol, dry with clean cotton and reapply the first dressing. This procedure will, if properly performed upon a patient under effective medication, put a prompt stop to the infection. Nitrate of silver (solid stick or saturated solution) is not so efficient but may be used if the acid and alcohol are not available.

Fever having been reduced and local conditions being under control we may stop the pilocarpine and substitute iron arsenate in doses of gr. 1-6. The writer prefers at this stage, however, to exhibit the three arsenates (of iron, quinine and strychnine) together three times daily, using for convenience the triple arsenates tablet (with nuclein). Two tablets form an ordinary adult dose. This formula together with boldine gr. 2-67 may be given t. i. d. for a month with advantage to the patient. Diet throughout must be light but nutritious.

The daily sponging off of the patient with the solution of magnesium sulphate is of marked benefit and where there is renal torpidity the exhibition of arbutin, gr. 1, with a glass of barley water two or three times daily will be useful; the daily enema, however, usually acts as a diuretic.

A study of the above therapeutic measures will reveal the fact that we aim to support the patient himself; maintain a germ-free intestine and render the lymphatics un congenial to germ propagation, while taking steps to enable the phagocytes to destroy

Obstetrics is not remunerative enough to warrant the practician in giving the woman the care she needs.—Grandin, *Med. Record*.

such bacteria as may already have gained access to the blood. We equalize circulation, make the skin an ally and destroy (locally) the invading streptococci. The practical results which follow such a procedure prove the soundness of the theory upon which the treatment is built.

Additional Remedies and Suggestions.—The physician should, however, treat the conditions present, not "named diseases," and while these measures serve in nearly all cases in which we have the group of symptoms known as "erysipelas," we must be prepared to intelligently add to or change our medication as the pathological conditions present in any one patient may demand. For instance, we are called late to a neglected or badly treated case. The local condition is serious, systemic infection intense and the delirious, disfigured patient, presents a typical picture of sepsis "run amuck."

No time is to be lost and our procedures must be well-advised and promptly effective. Gr. 1-3 of calcium sulphide must be given every half hour with echinacea in full dosage hourly. Locally, gauze wrung out of a solution of echinacea will have to be applied and changed frequently, the skin about the margin being painted every three hours with pure guaiacol. Calomel, gr. 1-3, iridin, gr. 1-3, and xanthoxylin, gr. 1-6, should be given together hourly for six hours and, one hour after the last dose, a full dose of magnesium sulphate must be exhibited to flush the alimentary canal. The latter should be repeated twice daily and the calomel and iridin every thirty-six hours till the disease yields. Colloidal silver ointment (*unguentum Credé*) will here give us good results; a piece the size of a hickory nut being rubbed in morning and night. The person doing the rubbing should wear finger cots; the ointment must be absorbed. Nuclein is

Pregnancy toxemia.—Best results come from hyoscine hydrobromide in large doses by hypo. till pupils dilate.—Grandin, *Med. Record*.

dropped under the tongue or given subcutaneously and the enema and epsom salt sponge-bath used morning and night.

Veratrine will be exhibited if the pulse is full and bounding and the heavily coated tongue shows a streak in the centre. If the skin is darkly red and moist this drug is particularly called for. A thin, quick pulse with dry skin (bright red) will suggest aconitine, though gelsemine seems to give even better results in these pronounced septic cases.

The selected remedy must be pushed to effect, small doses being given pending the action of the eliminants and antiseptics.

As soon as free bowel action and profuse diuresis are secured the temperature will usually fall and the local applications and use of calcium sulphide, echinacea and colloidal silver will prevent further elevation. Here cardiac support becomes important and cactus with strychnine nitrate will prove invaluable. Gr. 1-67 of each drug may be given every three hours. Bryonin and macrotin will often prove useful when pain is severe and of a rheumatic type. Barosmin may be added if the urine is scanty and if also highly acid lithium benzoate should be given at the same time.

Pilocarpine is distinctly an *early* remedy; in the initial stages it may be pushed fearlessly and with none but good results, but after a few days, it is not to be selected. One or two hypodermatics of pilocarpine with an initial purge and a twenty-four hours' course of calcium sulphide have served hundreds of times to cut short an oncoming erysipelas.

A word here as to erysipelas neonatorum. As we know, this disease is fearfully fatal. Echinacea locally and per os (one drop of sp. tr. or gr. 1-12 of the powdered extract) with calcium sulphide, nuclein and inunctions of *unguentum Credé* will prove our sheet-anchors. Ichthylol or carbenzol must

Fraenkel uses strophanthin intravenously, gr. 1-85, for non-compensated heart lesions; effect in 4 minutes, lasts 3 days.

be used freely about the umbilicus after thoroughly washing the parts with a 3 per cent solution of resorcin. One part of either preparation to two of lanolin will serve best. Camphor or aromatic spirit of ammonia are the safest stimulants; aconitine in minute doses in solution, with cactin and strychnine, to guard the heart, will complete the list of

dependable remedies. The epsom salt (creolinized) solution is of especial value here and may be used on compresses locally or with the "wet pack" for general eliminative effect. The danger to the mother must not be forgotten. A course of calcium sulphide may save her trouble.

Chicago, Illinois.

INTESTINAL ANTISEPSIS IN TYPHOID FEVER.*

BY JOHN FORREST, M. D.

IT is quite common to hear the opinion expressed that intestinal antisepsis is an impossibility, and that the treatment of typhoid fever based upon such a theory is a mistake. As I am totally at variance with this doctrine, both in theory and practice, I should like to present a few considerations tending to show that the true and most successful method of treating this disease depends upon intestinal antisepsis as a practical and well established fact, and one that we cannot afford to overlook if we would expect success to wait upon our efforts.

In the first place, then, were it indeed impossible to induce a condition of antisepsis in the intestinal canal, we should have to recognize it as a most deplorable circumstance, which we could well wish had been otherwise. For it is very evident that the vast majority of diseases are either themselves septic conditions of the intestinal canal, as typhoid fever, or are enabled to effect an entrance into the system by reason of the septic condition of that canal, or are at least greatly aggravated by such condition.

We are thus demonstrably in urgent need of such agents as can effectively limit the

life and action, or neutralize the toxins of the disease germs whose habitat is in the intestinal canal. That such agents are being constantly and eagerly sought for is well known and the number which claim recognition from time to time is ever increasing.

But before going further let us inquire what is meant by intestinal antisepsis. To expect that every microorganism, or even every pathogenic microorganism, will be removed from the bowel and perfect antisepsis established is more than we can hope for. Perfect antisepsis such as this is unattainable, even on the outside surface, and with the aid of mercuric chloride and the scrub. Only an approximation, more or less perfect, is ever obtained anywhere, and if it were obtainable we know very well it would not endure long enough to be verified. So also in internal antisepsis, only an approximation in this sense can be looked for. Yet we have no hesitation in saying that such an approximation is attainable as will change the whole complexion of a case and bring about most satisfactory results from very unpromising beginnings. Moreover, intestinal antisepsis is something altogether different from surgical antisepsis in which absolute sterilization of a given surface is demanded. For it is not perfect

*Read before the Medical Society of South Carolina and reprinted from Merck's Archives.

Bernard Shaw says that the prospect of earning \$300 in a day is a strong temptation to believe operation a necessity.—*N. Y. M. J.*

Asphyxia is complicated; if intoxication from carbonic acid excess is a factor, want of oxygen is another.—Bouchard.

health a condition of normal (Dr. Aulde) intestinal antisepsis? And what higher degree of antisepsis do we require to satisfy us? And yet such a condition is quite compatible with the presence of a countless multitude of microorganisms, some of which we know may even be pathogenic.

It is many years now since I first learned from the writings of Dr. Wm. F. Waugh, then of Philadelphia, now of Chicago, the use of zinc sulphocarbolate as an intestinal antiseptic, nor has it ever disappointed me when applied to the treatment of the various septic conditions of the bowels commonly met with. In the diarrhea of typhoid fever I have always used it, but it is only recently that I have come to regard the phenolsulphonates (as they are now called) as the specifics that they are in the treatment of the disease itself. And this I also owe to Dr. Waugh and his confrère, Dr. W. C. Abbott.

Three phenolsulphonates are used as medicines, the zinc, sodium, and calcium salts, of which the two first only are official.

Calcium phenolsulphonate is a colorless, nearly odorless, astringent, bitter powder, readily soluble in water and alcohol. The sodium salt is in transparent, colorless crystals, odorless, slightly efflorescent in dry air, of cooling, saline, somewhat bitter taste and soluble in 5 parts of water and in 130 parts of alcohol. The aqueous solution is neutral. The zinc salt is in transparent, colorless, efflorescent crystals, of astringent, metallic taste, soluble in 2 parts of water; in 2.5 parts of alcohol; aqueous solution acid.

The U. S. Pharmacopeia gives the average dose of the sodium salt as 4 grains, and that of the zinc salt 2 grains. The U. S. Dispensatory gives but a meager and unsatisfactory account of the action and therapeutics of these drugs, and little credit to their remarkable antiseptic properties. There is, however, one important point noted by

The prescription pad is the sole therapeutic armamentarium of 90 per cent of the medical profession.—*Southern Med. and Surg.*

the authors, that is, their non-poisonous character. They say, "The phenolsulphonates were introduced into medicine with the idea that they would decompose in the body into phenol and sulphates, but this is disproved by the fact that even in massive doses they fail to produce the changes in the urine characteristic of phenol." So that, whatever the products of their decomposition may be (although what they are it is not our province at present to inquire), it is certain that phenol is not one of them, nor is their antiseptic property in the least diminished thereby.

Of the three, the zinc salt is the best known and the most generally used. It is the most active, also the most astringent and irritant, while the calcium salt is the mildest, and the sodium salt comes between.

If the zinc salt is given too freely, or in too concentrated solution, or is not chemically pure, it may cause nausea and vomiting. But according to Dr. Waugh, the chemically pure salt has been given many times in doses of 10 grains, and up to 2 drams in twenty-four hours, without any such effects.

It is not, however, by any means necessary to give such heavy doses, in order to induce the requisite state of antisepsis in the canal. From 2 to 5 grains of the zinc salt may be given, every two hours by itself, or in combination with one or both of the other salts, so as to mitigate the harshness of the zinc, or secure the presence of the calcium, which is sometimes of advantage.

Now, granting that we have in such a combination of these salts a faultless intestinal antiseptic, how shall we use it, and how prove its value in typhoid fever? In the first place, then, just as in the use of external antiseptics, the grosser impurities must first be removed before applying the particular antiseptic intended to render the surface surgically clean, so in internal antisepsis,

In 1904 there were 867 nurses' schools with 21,844 pupils, and every little hospital also turning out nurses.—*Lancet-Clinic.*

we must first wash out the accumulation of filth that clogs the canal. This is done with calomel and a saline cathartic. The calomel should be given in small doses repeated, say 1-6 grain every half hour, or every hour, for six doses, or until the effect desired is obtained. The calomel may be advantageously reinforced with a cholagogue, such as podophyllin, also given in 1-6 grain doses. Two hours after this the saline cathartic (preferably magnesium sulphate) is given in dram doses every two hours until it acts satisfactorily. Being now satisfied that the bowel is thoroughly cleaned out, it is time to begin with the antiseptic, and the phenolsulphonates, in 5-grain doses, dissolved in water, should be given by mouth every two hours, and so continued throughout the whole course of the disease, the bowels thereafter being washed out frequently with enemas of warm water, carrying gr. 1 of the zinc salt to the ounce.

If this treatment is instituted at the very incipiency of the disease the effects are soon visible in the deodorized stools, their extreme and peculiar offensiveness being removed, and where there was looseness of the bowels and diarrhea the actions become more consistent and natural. Tympanites, if present at all, soon disappears. The temperature begins to fall before the end of the first week, and the cold bath, which has hitherto been the mainstay of treatment in this disease, is soon found to be unnecessary, to the great satisfaction of the patient, for the temperature having once fallen below the bathing point, or 103° F in the rectum, never reaches it again. With the fall in temperature, of course, the circulation becomes steadier and the nervous symptoms less marked. The duration of the disease is curtailed and many cases are brought to an end in two weeks. A slight rise of temperature in the evening may

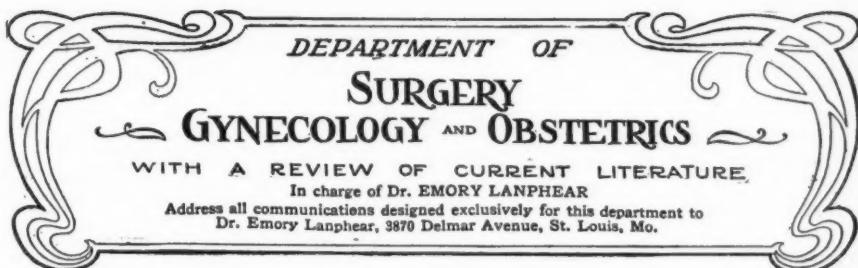
continue for a few days, protracting the case into three weeks, but with no cause for anxiety. In all cases the symptoms are milder and the complications fewer, nor with any other method of treatment that I know of can we be as sure of shortening the course of the disease as with this.

So much for the treatment of typhoid fever by intestinal antisepsis. But is this all? Far from it. For when we advocate the treatment of typhoid fever with intestinal antisepsics, we are aiding and abetting a revolution in therapeutics, and are setting at nought the time-worn doctrine that it is the province of the physician to treat the patient, but that it pertains to the patient to cure the disease. This is indeed the doctrine of the *vis medicatrix naturæ* pushed to an unwarrantable extreme, and would properly represent the doctor as seated on the summit of science, gazing admirably on nature doing the work, while he applauds. The word "cure" has been dropped from the vocabulary of the modern physician, who with a false humility boasts of his impotence to arrest, to jugulate, to cure disease. This imbecile system of therapeutics has led to such a contempt for the pharmaceutical remedies of *materia medica* that they have fallen greatly into disuse, being superseded by the so-called physiologic remedies, which are used to conserve the energy and build up the constitution of the patient—most admirable objects, of course, but most unwarrantably used, when they would cause us to set aside as useless that magnificent class of remedies, the powerful influence of which on physiological function has been recognized from the earliest times, and which, when used with knowledge, enables us not only to treat but to cure disease.

Charleston, South Carolina.

Cystitis:—Cantharidin has been used by Freudenberg in 56 cases, curing 32 rapidly. gr. 1-1800 t. i. d.
—*Merck's Arch.*

Do no harm. Try to see clearly why you give a drug. As far as you can, give a drug uncombined.
—F. C. Shattuck.



ETHYL CHLORIDE AS A GENERAL ANESTHETIC.

BY ALFRED DE ROULET, B. S., M. D.
Formerly Professor of Clinical Surgery in Trinity University.

IT frequently happens in practice that cases appear in which the administration of a general anesthetic would be very desirable, but yet where the existing conditions are scarcely of sufficient magnitude to justify the administration of either chloroform or ether. Until recently we have not possessed an anesthetic suitable for use in cases of this character.

Such an anesthetic should be portable, of stable composition and not prone to deterioration, easy of administration and requiring no bulky or complicated apparatus, and should be capable of producing rapidly and without danger to the patient a quiet, sleep-like narcosis which shall persist for several minutes after the removal of the inhaler, and which shall be followed by a rapid recovery unattended by unpleasant or dangerous symptoms.

In the past nitrous oxide has been employed to a limited extent for this kind of work, but it falls far short of the requirements of an ideal anesthetic. It is undoubtedly safe, and, as a rule, recovery from its effects is rapid and attended by few or no unpleasant features, but aside from this there is little that can be said in its favor. It is bulky, it is not stable, but deteriorates rapidly and requires a cumbersome apparatus for its administration.

Quite recently ethyl chloride has been

advocated as a substitute for nitrous oxide, and for all work requiring but a brief period of narcosis, ethyl chloride meets more or less fully all the requirements of an ideal anesthetic. It is portable; as found on the market only in sealed tubes it is not prone to deterioration; it is easy of administration and requires no bulky, complicated or expensive apparatus for its employment. It produces anesthesia rapidly and, when properly administered, with little danger to the patient. It is so rapid in its action, however, that unless watched closely there is danger of giving an overdose. In point of safety the consensus of opinion is that it ranks between ether and nitrous oxide. A full dose gives, after removal of the inhaler, an available anesthesia of from one to four minutes' duration and which, if complete muscular relaxation is not required, approximates the ideal. Its employment is usually followed by prompt recovery with no unpleasant complications or sequelae. The cost is trifling as an ordinary 30-gram tube is sufficient for half a dozen anesthesias. In one case where I employed ethyl chloride one and one half grams produced a complete narcosis lasting slightly over one minute.

HISTORY.

The first instance recorded of the employment of ethyl chloride as an anesthetic

is that of Heyfelder in 1848. In 1867 Dr. B. W. Richardson employed it in a number of cases and reported that he found it "a good, safe anesthetic;" but, although he published a full account of his experiences, his report attracted little or no attention and was soon forgotten. In 1880 the use of ethyl chloride having attained a certain degree of popularity among English dentists, a committee was appointed by the British Medical Association to investigate this new anesthetic, and after a few experimental anesthesias on animals, this ultra-conservative committee reported adversely, and for a time the use of the anesthetic was generally abandoned.

In 1895 Carlson, in the Dental Institute at Gothenburg, noticed that in many cases where an ethyl chloride spray was used to benumb the gums for certain dental operations, the patients became unconscious. This condition he attributed to the inhalation of the ethyl chloride vapor. Acting upon this, Thiessing and Billeter used it extensively as a general anesthetic with excellent results. During this same year, Soullier reported the administration of ethyl chloride as a general anesthetic to 8,417 patients in the hospitals in Lyons with no bad results. In 1897-8 this drug was systematically employed by Ludwig and Lotheissen in von Hacker's clinic, and Weisser, afterwards chief of this clinic, reports a personal experience of 400 general anesthesias without an accident.

During the next few years several thousand cases were reported and favorably considered by European medical and dental journals. Seitz alone published records which he had collected of 17,000 cases with but one death. In 1901 McCardie, of Birmingham, published a paper on "Ethyl Chloride Anesthesia," giving the results of his own experience with the drug and enthusiastically

The injection of mercury into the body causes an immediate increase in the number of leucocytes.—*Merck's Arch.*

advocating its employment. In 1903 he reported a series of 620 cases in which he had administered this anesthetic with no bad results.

PREPARATION OF PATIENT.

A patient should be prepared for ethyl chloride narcosis in exactly the same manner as for ether or chloroform anesthesia. He should fast at least four hours before taking the anesthetic, as the presence of food in the stomach increases the tendency to nausea and vomiting. The bowels should be moved and the bladder emptied immediately before the patient goes on the table, as in a small per cent of cases where this precaution is neglected involuntary defecation and micturition occurs during or immediately following narcosis. The clothing about the neck, chest and abdomen should be loosened as there should be no constriction which could in any way interfere with respiration. False teeth and other foreign bodies should be removed from the mouth.

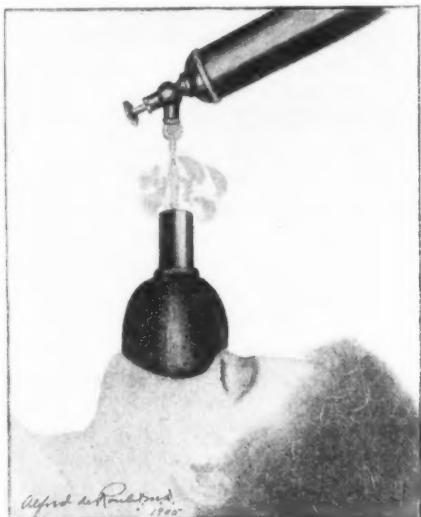
Owing to the rapidity with which anesthesia is produced it is well to have all preparations for operation entirely completed before the administration of the anesthetic is commenced.

METHOD OF USE.

During the administration of the ethyl chloride the posture of the patient makes little or no difference, although the recumbent position is ordinarily the most convenient. The anesthetic may be given in any closed ether inhaler, but I believe the inhaler designed by Tiemann for this purpose to be the most desirable on account of its simplicity, convenience and inexpensiveness. It consists essentially of a rubber cone with a fenestrum about an inch in diameter in the roof, and into this opening is fitted a metal tube about two inches long. As the ethyl chloride is sprayed directly into this

See in the *Ophthalmic Record* a fine paper by Bishop on the care of the eyes of school children. Send for it.

tube, several layers of gauze are stretched across its lower end to protect the patient's face. A drawback to this inhaler is that on account of the limited area for the evaporation of the ethyl chloride, the anesthetic is likely to freeze. This difficulty, however, may be obviated to a certain extent by warming the tube before each anesthesia.



Showing Inhaler and Method of Administration.

During the administration of the anesthetic the cone should be applied closely to the patient's face, care being taken to exclude excess of air. The amount of the ethyl chloride required varies with the patient and the nature of the operation. Other things being equal, a big robust man would require a considerably larger dose than a small delicate woman. Alcoholics, excessive smokers and athletes require more than the normal dose, while sickly and anemic patients require less. Hysterical cases often require relatively large doses. As a general rule 5 Cc. is a fair average dose for an average adult male.

In those heartrending cases where complete constipation of thought appears nothing can be done.—*St. L. Med. Review.*

In practice, it is advisable to give the full dose at the start and induce anesthesia as rapidly as possible, rather than to give smaller quantities and allow frequent or repeated re inhalation.

With the first few inhalations the patient may experience a pleasant feeling of exhilaration or a tingling throughout the body. Unpleasant sensations are rare, and as a rule unconsciousness comes on so quickly that the patient is unaware of any sensations.

During the first stage, owing to nervousness or to a mistaken notion as to how he should breathe, the respiration is often more or less jerky and irregular. There is also noticed a slight decrease of arterial tension but no appreciable disturbance of the pulse-rate. After a few inhalations the breathing becomes deeper and more rapid, the color improves, the pupils dilate but react to light, the conjunctival and corneal reflexes are unaffected. Excitement and struggling are seldom observed, and when present the condition is rarely marked except in alcoholics.

In some cases there is present a slightly increased salivary secretion and swallowing movements are not infrequent. A slight twitching of the eyeballs is frequently noted. As the patient begins losing consciousness the eyeballs become fixed, often in a position of convergent strabismus; the conjunctival reflex disappears and the pupils dilate widely and do not react to light. This condition of the pupils is often disconcerting to one used to the administration of chloroform. Stertor is usually present and varies from a gentle snoring to the loud noisy stertor characteristic of ether narcosis. The corneal reflex is not abolished until the patient is profoundly narcotized.

Some difficulty is often experienced in determining when the patient is fully under the anesthetic. Of course the signs vary somewhat with the degree of the anesthesia

Brilliancy in a surgeon is a quality from the possession of which he may well pray to be saved.—*Treves.*

and it should not be forgotten that with ethyl chloride, as with chloroform and ether, there are different degrees of narcosis, and that while a profound degree of anesthesia may be necessary for some operations, a lesser degree is sufficient for others.

When the patient's eyes are fixed, the pupils dilated, the conjunctival reflex lost and the breathing slightly stertorous the patient is sufficiently under for ordinary work. Muscular relaxation as a sign of complete narcosis can not be depended upon, as in alcoholics and men of powerful physique it may persist after unconsciousness is entirely lost. An English writer asserts that "the first snore is conclusive evidence of complete anesthesia" and this statement holds in many cases, but not in all.

For operations on the more sensitive structures it is sometimes necessary to push the anesthetic to the point of abolition of the corneal reflex, but it must be borne in mind that this reflex sometimes persists even when the patient is profoundly narcotized.

Under ordinary circumstances the patient is completely anesthetised in from thirty seconds to two minutes, and the narcosis will persist from one to four minutes after the inhaler is removed. Probably in the majority of cases the anesthesia lasts about two minutes.

Although ethyl chloride is not suitable for a prolonged anesthesia, in emergencies it may be continued for some time, although with a progressively lessening degree of safety to the patient. Whiteford reports that in one instance he has kept a patient under ethyl chloride narcosis for 35 minutes, while Montgomery and Bland report an anesthesia of 54 minutes' duration. In case the administration is continued for more than ten or fifteen minutes returning consciousness is likely to be accompanied by violent and painful retching, while fainting

At least ten years' experience in use of digitalatin German, Merck, justifies the writer's confidence in it.—J. M. Taylor, *Med. Mirror.*

and collapse have been reported in a few cases.

AFTER-EFFECTS.

When the anesthesia has been of short duration and only small quantities of the anesthetic inhaled, the after-effects are trifling, if not altogether absent. A slight headache with or without dizziness and sometimes associated with nausea or even actual vomiting are the most common, but even when present these conditions rarely last over ten or fifteen minutes. In the vast majority of cases, however, especially in private practice, recovery is rapid and without unpleasant symptoms. In clinic and hospital practice, probably on account of the different class of patients encountered, the recovery, while prompt, is more likely to be accompanied by unpleasant features, headaches occurring in from 20 to 30 per cent, nausea and vomiting in somewhat less than 10 per cent, and involuntary micturition or defecation in 2 or 3 per cent of such cases. Ordinarily the headache and nausea may be prevented by allowing the patient to remain quietly in the recumbent posture for a few minutes after the anesthesia.

Occasionally in young women and girls the first sign of returning consciousness is a burst of hysterical weeping, while in other cases the patient may be decidedly exhilarated. In one case in my own experience, the patient loudly asserted that he hadn't been anesthetized, but as he had just undergone a very painful operation without complaint, his assertions were disregarded, suffering in silence not being a marked characteristic of this particular individual.

In some patients, ethyl chloride tends to cause erotic dreams and sensations while in a semi-unconscious condition, and several cases are already recorded where fe-

We do not know the dose till the object is accomplished, manifestation dissipated, disease controlled.—Landers, *Southern Clinic.*

male patients, taking these dreams seriously, have brought suit for indecent assault. The advisability of the presence of a third person when a woman is anesthetized is apparent.

As a matter of course the administration of a drug sufficiently powerful to produce complete narcosis in thirty seconds must be accompanied by at least the possibility of danger, yet as to the extent of this danger different writers differ widely in their estimates. A writer in the *Journal of the American Medical Association* some two years ago said: "My experience with ethyl chloride as a general anesthetic is *nil*, but from the data at hand I would class it with the more dangerous anesthetics and would expect it to be especially dangerous in cardiac and respiratory trouble." Erdman believes it to be as safe as nitrous oxide and that it is especially valuable in conditions of shock and in serious diseases of the circulatory and respiratory organs. McCardie with his personal experience of over 600 cases, is enthusiastic in its praises. Lotheissen considers it on a par with chloroform in point of safety, while Hewit regards it a safe anesthetic and estimates its mortality at from one death in ten thousand to one death in fifteen thousand cases. Ware has collected reports of over eleven thousand ethyl chloride anesthesias with but one fatality, and Seitz, working in a somewhat different literature, has collected records of 17,000 cases with one death. This death, however, happens to be the same one reported by Ware, i. e., the case of Lotheissen's in von Hacker's clinic. In a recent summary of ethyl chloride fatalities, this case appeared three times, once attributed to Ware, once to Seitz and once to Lotheissen. Of course such duplications can soon run up an apparently enormous death-rate.

Scrini has abandoned all other collyria for solutions of alkaloids in olive oil, first sterilized.—*Lancet*.

FATALITIES.

So far, I have been able to collect a list of fatalities as follows:

CASE I. Lotheissen reports the following case from his service in von Hacker's clinic. The patient, a laborer, with a history of habitual heavy drinking, was placed under ethyl chloride (kelene) anesthesia for a slight operation (curettage of a leg ulcer followed by skin grafting). During the operation the patient showed violent excitement and more kelene was given. A few moments later the patient became cyanotic, the blood of a very dark color, while violent twitching of the leg muscles and intense trismus developed. The corneal reflex disappeared. The pulse was perceptible, but the respiration was spasmodic and stopped suddenly. All efforts at resuscitation were futile and the patient died. On autopsy, there was found marked eccentric hypertrophy of the heart, with sclerosis of the aorta and coronary arteries. In this case, while the patient was not a suitable subject for any general anesthetic, the death was probably due to the ethyl chloride.

CASE II. Bossart reports a case where ethyl chloride was administered preparatory to a tracheotomy in a child twenty-one months old, suffering with laryngeal diphtheria. As the incision was made, breathing stopped and the pulse became imperceptible. On post-mortem examination the diphtheritic membrane was found to extend considerably below the false vocal cords. There was also some enlargement of the thymus. Death was due to heart-failure, but whether this was due to the anesthetic or to the diphtheritic poison is an open question. Personally I am rather inclined to attribute the death to the disease rather than to the anesthetic.

CASE III. Olcot Allen reports the case of a negro, aged 28, epileptic, about to undergo

The hardening effects of cold baths are not so universally admitted in England as they were a few years ago.—*Lancet*.

SURGERY AND GYNECOLOGY

operation for strangulated hernia. The anesthesia was started with ethyl chloride, and after 15 Cc. had been given a change was made to ether. As the ether was started, the patient began vomiting and for two or three minutes, without retching or respiratory effort, an enormous quantity of clear, almost watery fluid poured from his mouth. When vomiting stopped, patient was dead. With artificial respiration it was impossible to force air to enter or leave the patient's lungs. A post-mortem was not allowed. In this case there is no ground for attributing the death to the anesthetic, the fatal result being due, in all probability, to the aspiration of the vomited material into the lungs.

CASE IV. At Stourbridge a corpulent woman of fifty, addicted to excessive indulgence in alcoholics, was given 6 Cc. of ethyl chloride for a trivial operation on her finger. The operation was completed and consciousness was returning, when the patient collapsed, death following almost immediately. Necropsy showed dilated stomach, cirrhotic kidneys, and a fatty liver. The heart was empty. In this case the death was probably due to the anesthetic.

CASE V. In this case a woman of fifty died in a dentist's office in Edinburgh during ethyl chloride narcosis. This patient had just recovered from an attack of pneumonia, the second within a few months, was weak and anemic, and had a dilated, fatty heart. She had been warned by her physician that the administration of an anesthetic in her case would be attended with grave danger. Disregarding his warning, she took the anesthetic. In this case a fatal result would have probably followed the administration of any anesthetic.

CASE VI. A young man, 28 years old, is reported as having died in an Edinburgh hospital while under ethyl chloride narcosis, but no particulars are given.

Who is going to start an agitation in favor of rendering the life insurance examiner independent in his duties?

CASE VII. A death from ethyl chloride is reported as having occurred in Plymouth, in July, 1905, but no particulars are obtainable.

Of these seven cases, three deaths are evidently due to the anesthetic, although not one of these three patients could be considered a favorable subject, and in two the administration of any anesthetic was positively contraindicated. Of the remaining four cases, in one (Case III) death certainly was not due to the anesthetic, and in another (Case II) probably was not. Cases VI and VII, on account of insufficient data cannot be considered.

ACCIDENTS.

As regards accidents, Hilliard reports a case of what he considered dangerous collapse in a young man upon whom he was about to operate for strangulated hernia. This young man, however, responded very promptly to restorative treatment.

A number of cases are reported in which patients have shown symptoms of asphyxia, but in practically all of these cases the trouble was due to very evident over-dosing, as, for example, the case recorded by Bussart, where 30 Cc. was given at a single dose. In all of these cases reported, artificial respiration brought prompt relief.

As a rule it is not safe to administer ethyl chloride to pronounced alcoholics or to patients suffering with acute inflammatory conditions of the respiratory apparatus, or with conditions giving rise to urgent dyspnea. While it may be given, it is never wise to push the anesthetic in fat patients, as this class of subjects does not take kindly to deprivation of oxygen and is likely to suffer more or less from shock.

USES.

As a general anesthetic ethyl chloride has been used to a certain extent as a preliminary to the administration of ether or chloro-

How far would the medical examiner be upheld when he refuses to pass a man whom the agent has worked up to insuring?

form. It is most useful, however, in the field of minor surgery. For example, under its influence, small tumors may be enucleated, a felon may be lanced, an ingrown nail treated, a bubo incised, a hydrocele injected, a stricture stretched, an ulcer cauterized, the abdomen or chest aspirated, or even some of the smaller fractures or dislocations treated.

In gynecology, with ethyl chloride anesthesia, painful examinations may be made, and a large number of small operative procedures accomplished. Urethral caruncles may be destroyed, vulvo-vaginal abscesses may be opened, vaginal cysts extirpated, the uterine cervix may be dilated and the uterus curetted, while mammary abscesses may be opened and drained.

The proctologist finds it useful in his work. Under ethyl chloride narcosis the sphincter may be dilated, fissures incised, hemorrhoids ligated, fistulæ laid open and perirectal abscesses drained.

The ophthalmologist will find it useful in the examination of eyes, especially in children, where pronounced photophobia is a

symptom. With its use also a lens may be needled, a Meibomian cyst opened or a lachrymal probe passed.

In nose and throat practice it bids fair to become very popular. Under its influence tonsils and adenoids are removed, nasal polypi extirpated and nasal spurs operated upon.

In dentistry it has a wide range of usefulness. In dental practice it is well to insert a small wooden plug between the teeth before beginning its administration, as spasm of the masseters is of rather frequent occurrence. When this precaution is observed there is practically no dental operation which cannot be successfully carried out under ethyl chloride narcosis.

Owing to its convenience and its power of rapidly producing an anesthesia which is followed by quick recovery with few or no unpleasant sequelæ and with comparative freedom from danger, ethyl chloride bids fair to come into general use and ultimately to usurp the field now occupied by nitrous oxide.

Chicago, Illinois.

AN APPENDICITIS OPERATION UP-TO-DATE, AS THE PATIENT SAW IT.*

BY F. S. FISH, B. S., M. D.

AT —— in 1895, on the 19th of May I think, the writer was operated upon for "appendicitis," and in relating the experience to Dr. Delap, he was so amused that he asked me to tell the story to the Richland County Medical Society, and they in turn have asked me to write the article out for publication. With this explanation I proceed.

*Read before the Richland (Wisconsin) County Medical Society.

Ubi jus, ibi remedium. A few years ago the man who said any case of tuberculosis was cured was set down an ass.

It is not very amusing and not very instructive except to show the progress in the surgeons' art.

CASE I. The patient was a male, thirty-five years of age, and had previously had trouble with his digestion since 1884, at which time he had taken a severe cold and had a fainting spell, high fever and a dose of twenty-three pills given in divided dosage and a reasonable amount of whisky. In

When tuberculosis was thought surely incurable pneumonia was considered quite amenable to treatment. Fact or theory?

1890 he had a severe attack of indigestion that yielded to treatment by calomel followed by bicarbonate of soda, bismuth subnitrate and pepsin and a change of boarding places from the "Dutch Iowa saloon" to the good Scotch parson's, and a liberal allowance of boiled rice with cream and sugar.

The bowels in our case were a little sluggish but regular daily movements were had. One severe lancinating pain had occurred some four or five days before the operation. The patient had visited his physician the following day and received treatment, and had taught school between the visits until the dull aching pain was so exhausting that he lay down at recesses and noon, and he was finally sent to bed by the doctor. There was a temperature gradually rising in a geometric ratio. There was a little soreness on pressure over the abdomen but not localized; the abdominal muscles were not very lax, the appetite was not very good and the patient did not rest well.

The doctor thought it was a case of appendicitis and advised immediate operation—there was not time to get an eminent Milwaukee physician there, though the trains ran regularly between the places and the cities were only sixty-five miles apart. They called in an eminent surgeon from a neighboring village, a doctor who had been to Europe, and the patient called a local physician, a recent graduate of Rush or the P. & S., of Chicago.

After due examination the doctors agreed on a diagnosis and made the room ready for the operation with soap and water and bichloride of mercury solution. The furniture consisted of an ordinary kitchen table with no leaves and no paint.

The patient inquired if they had operated on any cases before and he was informed they had—two. He asked how they suc-

ceeded, and they said both had died. The patient wanted to know: if in case he had not appendicitis, would the operation endanger his life. He was informed it would not. He then said they ought to know what was best to do and so consented to the operation.

They shaved and cleansed the site thoroughly and vigorously. For anesthesia they used chloroform a part of the time and ether a part. The patient stopped breathing and they hitched the forceps on to the tongue and held it out of the throat so thoroughly that it had to be iced and antisepticized for nearly two weeks. They made an incision along the rectus abdominis near McBurney's point, five and one-half inches in length. The operation lasted two or three hours. They were unable to find the appendix.

They sewed up the wound by through and through sutures and it "healed" by "first intention," so they afterward informed me. They failed to unite the separate layers by courses and hence there were various "tuberousities" when an attempt was made to contract the abdominal muscles. Following the operation the scar spread, though a light bandage was worn continually, being a part of the time a twelve-dollar abdominal supporter. In addition to the sutures and bandages they used adhesive strips which were left on for weeks.

Following the operation there developed two hernias; one abdominal and one complete inguinal, the former being as large as one's fist. A large leather pad was afterward used to hold it in place. They gave me Alonzo Clark's treatment for peritonitis, consisting of good-sized doses of opium. The family physician gave a high enema with the long tube and removed a milk pail full of feces.

After the operation, preparation was made for the funeral as the doctors said

Meunier defends the chewing of gum as it stimulates the salivary flow and aids starch digestion.—*Lancet.*

Hwat bist du Libjem, Ien wirch stribjen, Fen pine noed in soarch. Lange oeren in smerte, In nochten ho koart. Det ford wine de moarns.

the patient was dying and would not live two hours. Brothers, and the brethren in the distant home lodge, were informed. Upon what resting place the appendix was to be pinioned I know not. But by the virtues of a trained nurse, John Murphy from a dental school in Chicago, my life was spared for further proceedings on the part of the surgeons.

The anesthetics and perhaps the disease caused acute nausea and vomiting. They limited the amount of water taken to one teaspoonful each half-hour. My temperature was 104° F. The temperature of the room at midnight was about normal, 98° F. Mr. Murphy's health was poor so they procured an editor as nurse, and the doctor's hostler alternated with him at two dollars a day apiece, which was only twenty-eight dollars a week for two. On the third night after the operation when the room was good and hot and the fever was good and high and after the high-school principal had economized by putting the ice out of the window lest it melt, I attempted to help myself to some water from a tumbler near by, when the editor stepped in and removed the tumbler, getting a "counter" across the jaw and being dismissed from service—the good neighbor Jones acting as nurse the rest of the night.

The editor acted as reporter the next morning and the attending physician had an "inquisition." He wanted to know what was the matter between me and the nurse. I told the doctor I had slapped him—the editor—for taking the water from me and I did not wish a continuance of his services, as "he did not know anything." Thereupon the doctor informed me that the nurse was obeying orders.

Then began the consultation between the patient and the family physician. "Doctor, I have studied physics. I know you

cannot reduce the temperature of the body without conduction, radiation, or evaporation. You can't get radiation unless the surrounding medium is lower than the radiant body, nor conduction, and you can't get evaporation unless you have some liquid to evaporate. I am burning up with a fever and I must have water internally and externally." (This was before I studied medicine.)

The doctor yielded and gave a glass of good cold water. And after his vigorous plea for the return of his faithful servant I consented to the editor's return. The doctor left orders that I be bathed in alcohol and water as often as I desired.

They took great care to clean the large bowel with frequent suitable enemas—the doctor attended to this himself. He gave me peptonoids plain and then tried them with creosote later. I was improving so they called a consultation of doctors. They reached the conclusion that I needed magnesium sulphate in tablespoon doses and that I needed creosote in the peptonoids, so I got them both. I thought my lung was filling up with smoke and my pain was so severe that no one in the block could sleep. They called in the young doctor. He gave me a good scolding for "making so much fuss" and gave me a hypodermic of morphine. It relieved the pain but I could not sleep.

The next morning the family physician and I had another consultation. The conclusion was reached that we discontinue the creosote and call in no more consultants while I was improving. In three weeks I was out, very weak, but with a loss of only twenty-seven pounds. The eminent physician who directed the incision had to be paid, so I taught school and paid him his price, twenty-five dollars. The other physician would receive no pay. I went to

An adult man passes daily from his bowels from 30 to 50 billions of bacteria, say Vignal and Suck-
dorf.

Many intestinal microbes are harmless during health but become extremely virulent under changed conditions.—Oliver.

Milwaukee and there lived on beef and toast three times a day for one year. Carrying my burdens for eight years with poor digestion and a weak abdomen while I dozed through the lectures of a four years' course in medicine, or partially slept while reading law or teaching the disorderly in Milwaukee, I concluded to try it again and see if I could not get a better result by intrusting myself to the skill of the modern surgeons. Having sepsis was my greatest fear.

OPERATION No. 2. Patient was in usual physical condition with poor digestion, languid and with two hernias as before related.

The usual course of calomel followed by salts was administered. The abdomen was shaved, washed with soap and water, followed by ether and then alcohol and an antiseptic dressing applied. This work was intrusted to the interne after a good general tub bath by the patient. The interne carelessly suffered the ether to destroy the epidermis of the scrotum, and this resulted in a large sore requiring treatment for several days.

At an early morning hour they conducted me to the operating room and while I was telling them I required little anesthesia and how sore my tongue was before, I fell asleep. When I woke they in due time told me how they had removed the old long broad scar, had dissected back the respective layers of the abdominal muscles, had removed the appendix obliterans vermiciformis, how they had united the separate layers and also united the layers by through and through sutures and how they had modified the Bassini operation for inguinal hernia.

They did not tell me how the interne had examined the abdominal viscera. They left that for him to tell.

They used adhesive strips to help lessen my girth and they put the bandage on very

firmly. This was evident, for it would not let me sleep and for eight days and nights I slept but six hours, notwithstanding the morphine, trional and bromides used or ordered. They ordered calomel daily, but this I refused to take. I was then permitted to take Waugh's anticonstipation. They kept me for several days on peptonoids at my suggestion.

The nurses did not tend to the bed-pan and I swung my feet out of bed and got on to the chair where it sat. This was the night following the operation. Of course this called forth a sharp rebuke from the surgical nurse and some unpleasant words from the surgeon but I was bound tight enough so it did not hurt.

I threatened to remove the bandage if they did not loosen it but they did not mind me, so I loosened the top pin to keep the bandage from cutting me in two. After much complaining about the bandage and several requests to have Dr. — see me and treat my digestive system, and after objections by my physician and threat to remove me from the hospital by the superior woman, they consented to remove the bandage on the eighth day and examine the scar.

They found much "edema," and they relieved it by a slight incision and moist antiseptic dressing. The left side of my abdomen had several suppurating sores due to the intense pressure. They were cleansed, and they healed in due time.

On the day following, normal stool was reported and they brought me boiled pork. I did not eat it, however, and my favorite, the good sister Lily, rebuked the offender and assured me it was a mistake. The night following the moist dressing I slept soundly. The dressings were intrusted to the interne next time and he dressed the wound after handling the genitals without

Long after microbes have been destroyed the enzymes or ferments they formed continue to act.—Oliver.

The dangers from typhoid surmounted there remain risks from autointoxication from intestinal toxins.—Oliver.

washing his hands. He washed the sore by dipping the sponge back and forth from the solution to the scar and elsewhere. I reported to the surgeon and thereafter he dressed the wound himself, attended by the good sister Lily.

On the twenty-third day after the operation I was discharged. I took my grip and walked to the car. I have not used a bandage or abdominal supporter since the operation and my digestion is as good as any

other man's. So much for the skill of the surgeons and the surgical cleanliness of the nurses, which play so large a part in successful surgery.

I should add, it is much to the credit of the interne that he used but little of the anesthetic and I had no vomiting following the operation. For the surgical technic of the operation I refer you to Dr. Jobsie of Milwaukee.

Lime Ridge, Wisconsin.

THE IMPORTANCE OF EARLY DIAGNOSIS IN CANCER OF THE RECTUM AND SIGMOID.

BY R. D. MASON, M. D.,

Professor of Rectal Surgery in the John A. Creighton Medical College, Surgeon to St. Joseph's Hospital.

THERE is a time in the life of all malignant growths when they are purely local and if removed thoroughly during this time recurrence will not take place.

When these growths occur in the interior of the body where they are inaccessible to either sight or touch, mistakes in diagnosis and delay in operating are excusable, as the most expert diagnosticians are often unable to tell with certainty the nature of the trouble. When they affect organs or tissues at or near the different openings of the body, as the rectum, vagina, etc., no great degree of skill is required to diagnose them and it is entirely inexcusable to allow them to progress beyond hope of recovery before a diagnosis is made.

My experience in treating rectal diseases leads me to believe that something may be done to forestall or prevent cancer long before it has actually made its appearance. I do not put much confidence in the theory that cancer is an inherited disease, neither do I believe that it is due to a germ, but I do believe that it is caused at least in some

cases by prolonged traumatism, or irritation. This is especially noticeable in cancer of the cervix and pylorus, also in that due to irritation of the lower lip by the pipe, the so-called smoker's cancer. These localities are all subject to constant irritation and should they become diseased from any cause, such as a prolonged ulceration, or small growths, or from the irritation of an old cicatrix, malignant disease may develop. I realize the fact that I cannot prove absolutely that this theory is correct; neither can any one else prove that it is not true, or demonstrate beyond doubt any other cause for the disease.

It is not at all uncommon to find cancer following an old laceration of the cervix; in fact, most of the cases found here are in the cicatricial tissue of an old, healed laceration. In his "Operative Gynecology" Kelly says in speaking of these cases, "A potent reason for operating on these cases is the remarkable frequency with which they are associated with cancer." It is well known that ulcer of the stomach, especially if located near the pylorus where it is sub-

Few medical men but have had some success following the use of intestinal antiseptics in typhoid fever.—Oliver.

Calomel followed by saline will often clear the patient's mind as well as relieve his body in acute maniac delirium.—Oliver.

ject to the constant irritation induced by the contraction and dilation of the muscular fibers, may develop malignancy.

As applied to rectal diseases I wish to quote briefly from other writers as to the liability of local irritation being the cause of carcinoma. Volkmann, Quenu, and Hartmann and Stierlin, as quoted by Tuttle, claim that fifteen per cent of carcinomas are preceded by hemorrhoids. Gant says, "In this connection it is well to remember that the closest observers consider cicatrices, benign epithelial growths, ulcers (especially tubercular), epithelium displaced from whatever cause and chronic inflammation as predisposing causes of cancer." Matthews says, "Chronic inflammatory products, cicatrices and benign epithelial tumors are favorable local conditions." I might quote many other authorities along the same line to prove my position but believe the above sufficient.

Granting then that cancer may be caused by local irritation, especially in localities near the different openings of the body, it is important that these openings should be kept as free from disease and irritation as possible.

In my study of rectal cancer I have found that almost without exception, if questioned carefully, the patient will give a history of some rectal trouble that existed long before the actual beginning of the malignant disease. This may have been in the nature of a fistula, especially one that has been operated on two or three times without success; or it may have been an ulceration that has involved considerable tissue; or the constant irritation and chronic inflammation due to the forcing out and in of old indurated hemorrhoids. While the sources of rectal irritation are very numerous the sigmoid does not suffer to a corresponding degree, but to a less extent and in a differ-

ent manner; and it is less frequently the seat of the disease than the rectum. It has one source of irritation that the bowel lower down does not have, and this is chronic inflammation. This is due to the fact that the sigmoid is the receptacle for fecal matter, while the rectal pouch is, or ought to be, empty most of the time.

During the winter of 1904-05, within a period of about four months, I had seven cases of rectal cancer all but two of which were so far advanced that hope of relief from operative procedure was out of the question. These persons all had histories of some rectal trouble dating back several years, showing that the disease was originally some less formidable malady which might have been cured, with, possibly, the prevention of the cancer. I do not wish to be understood as saying that hemorrhoids, fistula, etc., may "turn into cancer," but that the traumatism and irritation which they produce may put the tissues in such shape that malignant disease may develop.

A human being, from a mechanical point of view, is much the same as a machine; the latter will, if allowed to get out of order or broken, soon go to pieces if not repaired, because of other breaks caused by the failure to mend the first one; just in the same way the human machine is weakened because certain abnormal conditions that are readily curable are neglected. Should the disease be one that involved great risk to life or where the result was uncertain there would be some excuse for delay but nearly all of these under consideration are not especially difficult to diagnose and cure.

When a patient comes to me with some rectal trouble and I find a tumor of any kind, no matter whether it be a hemorrhoid or some form of benign growth, or should there be a fistula, ulceration, or in fact any abnormal condition of importance, I feel

The four chief pathologic processes are primary dystrophies, nerve reactions, disturbances before nutrition and infection.—Bouchard.

The role of the physician is not exclusively to seek the infectious agent, but it should count with him.—Bouchard.

that proper treatment is imperative and almost as urgent as it would be should a woman come with a tumor in her breast. In either case if left untreated no harm may result yet there is always the possibility that malignant disease may be started with fatal result.

I do not think it wise or right to frighten people into operations and I never do this. If they are told bluntly that their piles might turn into cancer they will be needlessly frightened because they will not understand the doctor's real meaning; but if it is explained to them that any diseased condition that is curable, and that can be cured with but little danger to life should receive attention as it might be the means of starting some more serious conditions that would not be so easily remedied, intelligent patients will at once see the force of the argument and have any diseased condition that may be present attended to.

I have had patients write to me stating that they had some rectal trouble and wish to make arrangements to come for treatment. For some reason the visit was not made and the treatment postponed for several months, and when they did finally come I would find a well-marked case of carcinoma. Had they attended to the matter when they first noticed the trouble the disease might have been removed with some hope of permanent cure.

The symptoms of rectal cancer in its early history are rather vague and ill-defined. The patient may apparently be in perfect health and complain of nothing more than a sensation of weight and uneasiness in the rectum; there is now no real pain, hemorrhage or diarrhea. The patient thinks that he has hemorrhoids although there is no protrusion or other evidence of the disease. Should the surgeon be consulted at this time by a person past middle life, if no

other well-defined disease be discovered malignant trouble should be suspected and the patient carefully watched so that an operation may be done at the earliest possible opportunity after a positive diagnosis has been made. Many times, even before any serious symptoms appear, the finger may detect a point of induration or hardness well up in the bowel wall. This hard lump is under the mucous membrane in the submucous or muscular tissue, is freely movable and is usually not painful on pressure. It is safer to remove it at once but should the patient refuse an operation it should be looked after and if there should appear any sign of an increase in size an operation should be insisted upon at once.

Later there will be well-defined symptoms of a more positive character. These consist in diarrhea which alternates with constipation. This is not due thus early to obstruction but is caused by the less movable, fixed condition of the bowel-wall. Later, as the growth invades the lumen of the gut more obstinate diarrhea and constipation occur due to obstruction, and the irritating action of retained feces. There will now be a discharge of a porridge-like substance which may contain traces of blood, but this as a rule does not appear until the growth has broken down and ulceration commenced. Even as late as this if the growth is movable and does not seem to be attached to surrounding structures it may be removed with considerable prospect that it will not recur. After the entire rectum has become involved and everything in the pelvis infected with the cancer-cells it is simply foolish, in my judgment, to attempt a radical cure with any hope of success even in prolonging life, as, should the patient live through the operation, the disease will return before the wound has healed. The freshly cut surface offers

Microbes invade the body; health fails when through disordered nutrition the chemic constitution is modified.—Bouchard.

Every nerve excitation, cold, shock, emotional or traumatic, may produce syncope, epistaxis, diarrhea, polyuria.—Bouchard.

new areas for infection and recurrence is very rapid.

As these patients first consult the general practitioner I wish to enter a plea in their behalf that more attention be given them in the earlier stage of their disease, that more radical measures may be carried out while there is some hope of success. These cases are not very common but when they

do occur it is their family doctor to whom they go for advice and he is the one to whom they look for relief. If he lets valuable time pass, the disease will make such progress that the patient's life may be lost, while an early diagnosis might have saved it or at least have given a year or two longer lease of life.

Omaha, Nebraska.

THE TREATMENT OF ENDOMETRITIS.

BY CURRAN POPE, M. D.

Professor of Physiological Therapeutics in Kentucky School of Medicine; Medical Superintendent, Pope Sanatorium, Louisville, Ky.

II.

IF zinc mercuric cataphoresis is to be used we take the zinc electrode and carefully clean this with the emery paper. Now saturate a small piece of cotton with dilute hydrochloric or sulphuric acid and rub over the zinc electrode. Next immerse the electrode into some clean metallic mercury and polish with the damp cotton containing the acid solution. When this is done the electrode will shine as though freshly plated. It is now sterilized in hot water and introduced into the uterine cavity. As before stated, one of the great advantages of this treatment lies in the fact that this electrode can be removed without the aid of the negative pole of the battery and for this reason we have the zinc and mercury action positively limited to one pole. It may be stated that the after-treatment in each case is the same.

High-frequency currents are being more employed each year in the treatment of inflammatory conditions of the uterus. The author has found them to be of advantage in those cases in which there is so much tenderness and pain as to prevent the use

of the preceding electric methods, for these currents are distinctly analgesic in their action. I have noticed that after their use for a short while, pain, tenderness and irritation seem to be lessened. As the author has shown in another article* the action of these currents is to stimulate the vitality of the tissues, increase the general trophic functions similar to the action of electricity on growing plants, causing inflammatory exudates to be absorbed and producing increased cellular action, increased vascularity and increased lymphatic action. They are antiseptic and antimicrobic in their action. Under the use of physiologic methods the author is constrained to believe that a greater number of cases of sterility are relieved than under any other method. Treatment must be persisted in and where this is done, success usually crowns the effort.

In cases of senile endometritis, dilation and drainage brought about by the negative galvanic action and the use of vaginal douches give the best promise of cure.

Should hemorrhage or excessive menstruation continue positive electrolysis is the most prompt and satisfactory method

*High Frequency Currents, by Curran Pope, *Jour. Advanced Therapeutics*.

Without any preliminary change in nutrition man is sheltered from infection; except in case of syphilis.—Bouchard.

The physician ought not to allow himself to be absorbed alone in the search for a microbe; study also immunity.—Bouchard.

of immediately checking the flow. The following method of treatment has given the author most satisfactory results: The nurse first gives the patient a very hot vaginal douche—in fact as hot as can be comfortably borne, just short of burning, and places her in the dorsal position. A large ten by twelve felt pad, soaked in the bicarbonate of soda solution is then placed on the abdomen, speculum introduced and the zinc mercuric electrode, about two inches in length, introduced into the uterine cavity. The *negative* pole is connected with the abdominal pad and the *positive* pole with the intrauterine electrode. Fifteen to twenty cells are now thrown into the circuit by means of the cell-selector and the current gradually turned on by means of the rheostat until it registers from 20 to 50 ma. This should be allowed to flow for about five minutes, at the end of which time the electrode should be removed. Coagula of blood will be noticed at the external os of a dark color. The zinc mercuric electrode should be used, as it adheres but little to the tissues or blood-clots and because it limits the electric action to the positive pole. After this treatment the patient is put to bed and kept quiet, with the hips elevated. If necessary the treatment should be repeated in order to check the hemorrhage. When there is a marked tendency to uterine hemorrhage we should avoid using the *negative* pole at or about the time of the expected period.

In some cases of virginal endometritis, in spite of the urging of the physician and the need for treatment, the patient will decline local methods. We can then have the nurse use the bipolar faradization. This method is the same as the one with which we commenced the treatment of chronic endometritis. It gives temporary relief, improves the condition, does not cure, and

New discoveries contain nothing subversive; the lessons of ancient medical observations are not compromised.—Bouchard.

its cessation is nearly always followed by a recurrence of the trouble. In these cases we may also employ percutaneous galvanization: The patient lying upon the table with the clothing loose, the nurse places upon the lumbar region and lower abdominal and pelvic regions, two large felt pads ten by twelve inches, wet with a hot soda solution, and so arranged as to prevent the wetting of the clothing. The negative pole is connected with the abdominal pad and the positive with the lumbar pad. The current is now gradually turned on through the rheostat until 20—30—50 ma. are given. The duration of the treatment should be about five minutes. It will certainly help endometritis but it does not cure.

General electrical treatments are nearly always valuable in these cases and nothing is better than the galvano-faradic method. Place a four by six-inch felt-covered electrode over the pelvic region, attached to the negative pole; put a three-inch round-curved electrode at the nape of the neck, both being well wet in the hot soda solution. By means of the cell-selector throw in twenty-five cells into the circuit. With the current-selector secure the combined or mixed currents. Now commence to turn on the galvanic current slowly by means of the rheostat until 10 to 15 ma. are registered. When this is reached turn on the faradic current from a twenty-one or twenty-two wire coil until comfortable tolerance is reached. Allow these two currents to flow for four minutes, at the end of which time throw this off and substitute for a curved electrode a three-inch round, felt electrode well heated with the hot soda solution and rendered slick by means of soap. Turn on the current in the same manner and pass the electrode slowly up and down the spine from the nape of the neck to the coccyx. This treatment will be found a most valuable

While seeking means of combating microbes, sustain the forces of the organism and make good its defense.—Bouchard.

and useful treatment in relieving a number of the reflex and transferred pains, increasing appetite, bettering digestion, relieving constipation, and giving tone to the nervous system.

In those cases in which we have to deal with obstinate constipation, or in which splanchnoptosis is present, recourse should be had to the sinusoidal current in addition to general and local measures. The patient is placed upon the table and the nurse introduces into the rectum the curved rectal electrode. The abdomen is then exposed and well wetted with soap and water. The rectum-electrode is attached to one pole and the three-inch, round, felt-covered electrode to the other, which later is placed upon the abdomen. The current is now turned on to sufficient strength to produce vigorous contractions as the electrode is moved over the abdominal surface.

Within the broad range of therapeutics there is no treatment, to my knowledge, that is so conducive to good results in the toning of intestinal, colonic, and abdominal muscles as the sinusoidal current, and I feel satisfied from no inconsiderable experience that I owe to this current some of the best results that I have obtained in overcoming the conditions mentioned and for which this current is suggested. Its application should range from three to five or even seven minutes daily, or thrice weekly.

In static electricity we have an agent that is of undoubted value in the general physiological stimulation of these cases. I am confident that it has materially aided in

restoring many women to general and sexual health, who have been the sufferers of obstinate endometritis. It should be applied generally and locally. The best method is to place the patient upon the insulated platform and at the start give simple positive insulation. We may next add sparks to the spine, down the limbs, and over the utero-ovarian region. This is a powerful stimulating measure.

An excellent way of treating these cases is to first apply the sparks as just directed and then give the static wave-current by means of a block-tin electrode and a spark cap of two inches with the pad applied over the pelvic region—duration ten minutes. Where much headache, dizziness, and other cerebral symptoms are present, we can vary the wave current with the static head breeze, though it will generally be found that these symptoms are better relieved by the general and local medication.

Sanatoria are the best places for the treatment of these cases, for within their walls the treatment may be so arranged into a schedule as to combine both general and local applications so that the patient is able to receive the proper hygiene, diet, exercise, hydrotherapy, massage, electricity, douches, local applications, etc. In addition the woman is free from the harassing cares of home, and household; the worrisome "servant problem" is eliminated; the care, attention, and labor incident to the rearing of children is avoided and perfect rest, mentally, physically and sexually, is secured.

Louisville, Kentucky.

SURGICAL NOTES

BALSAM OF PERU FOR WOUNDS.

Balsam of Peru is a much-neglected agent in the treatment of wounded surfaces—

On the mother is thrown the burden of eliminating by kidneys, liver, intestine, skin and lung, poisons of two bodies.—Oliver.

especially those attended by suppuration and consequently slow granulation, like operation for fistula in ano. In a late report Schloffer details his experience in a

Maternal autointoxication varies from high tension, headache, nausea and lassitude to puerperal eclampsia.—Oliver.

hundred cases and says this experience has convinced him that the balsam has certain properties which surpass those of any other substance at our disposal for the treatment of wounds, especially in crushed and soiled tissues. Severe inflammation never develops in an infected wound like that of a crush in railway work, treated with the balsam in the first twenty-four hours. The balsam is poured into the wound and every crevice filled. It attracts the leucocytes to the spot and has a kind of mummifying effect on the dead tissues, while it mechanically checks the development of microorganisms.

FOR GASTRIC ULCER.

When patients will not submit to operative treatment for gastric ulcer the pain may be controlled far better than by the use of morphine by simply having the patient take a teaspoonful of bicarbonate of soda in lime water, with a few drops of essence of peppermint added.

COLITIS AFTER APPENDECTOMY.

Medical Standard calls attention to the very important point that after removal of the appendix, symptoms of appendicitis sometimes persist, leading the patient to believe that the organ has not been extirpated. These are generally due to a colitis, which must be treated by high irrigations, diet, etc.

SWELLING OF THE LEG.

Under its head of "Surgical Suggestions," *American Journal of Surgery* says: Swelling of the leg may be produced by hematogenous infection of a hematoma of the calf muscles. Such a condition may somewhat simulate

Pregnancy may seem normal till improper food admits to the blood indigestion products and eclampsia follows.—Oliver.

osteomyelitis or other serious condition. It may be differentiated, however, by the location of the greatest tenderness and swelling and by a careful inquiry into the history. If no distinct traumatism is recalled the condition of the patient's arteries may nevertheless suggest the possibility of the occurrence of such a hematoma."

OPERATIVE TREATMENT OF FRAC-TURED PATELLA.

Incision over the fracture, withdrawal of the soft tissues from between the fragments and suturing with twenty-day chromic gut, constitute the essential features of the most approved treatment of fracture of the patella. Recently Theim has shown that the mortality of cases properly operated on is no higher than that of those not cut. Cases not operated on generally do not get full use of the limb, cannot kneel, and have difficulty in going up-stairs or up-hill. Only those cases in which there is no separation of the fragments give ideal results from non-operative treatment. Cases treated by suture generally have complete return of function, and only require half as long on the average for union to occur. He believes that all cases in which the fragments are at all separated should be operated on at once. Ochlecher has lately discussed the pathological condition, and shows that operation gives better results than other methods. Where the fragments can be brought into perfect apposition easily the circular subcutaneous suture around the patella is perhaps satisfactory, but generally the bone should be exposed and united by silver wire or No. 4 chromic gut passed through holes bored from the anterior surface near the break and coming out on the back part of the fractured surface, so that the joint proper is not entered. The ligaments are sewed

Near end of pregnancy with intestinal and renal autotoxemia there may be an hepatic toxemia as well.—Oliver.

with plain catgut. To get perfect function it is necessary to begin use of the joint early and to force exercise in spite of pain and stiffness. Massage and passive motion must be begun eight or ten days after operation, and walking in three weeks.

INTERNAL USE OF LYSOL.

Relative to the advice in March issue of *CLINICAL MEDICINE* to use drop doses of lysol when marked anorexia exists, Dr. John Parr, of Methuen, Mass., writes that a local druggist refused to dispense a prescription calling for one drop in each capsule of extract of gentian and licorice powder, stating that "it is a deadly poison." So is carbolic acid, which is of the same strength, but a druggist who knows his business would scarcely refuse to dispense drop doses of it for internal use. The lysol treatment is of great advantage in cancer of the stomach and is much used in Germany in the dosage mentioned, whenever it is deemed wise to increase the appetite.

SCOPOLAMINE ANESTHESIA FOR HERNIA.

One of the instances in which scopolamine-morphine anesthesia is particularly indicated is reduction of strangulated hernia. The relaxation is almost as complete as in chloroform narcosis and there is not the vomiting which usually follows general anesthesia and which sometimes cannot be distinguished from early stercoraceous emesis.

GASTRIC ULCER.

Before resorting to surgical treatment the Lenhartz method should be tried. It is as follows: (1) Absolute rest in bed for at least four weeks, (2) avoidance of all mental excitement, (3) almost constant use of ice

Microbes may act by blocking vessels, eroding cells, causing fatal lesions, consuming needful food, or producing toxins.—Bouchard.

bags over stomach for two weeks, (4) daily administration of from 200 to 300 Cc. of iced milk by spoonful and two to four beaten eggs, (5) the use for ten days of 2 Gm. (30 grains) of bismuth subnitrate at a dose. Importance is attached to the use of beaten eggs. They are beaten whole with a little sugar and kept in contact with ice.

INTUSSUSCEPTION IN CHILDREN.

Sixty per cent of all cases of intussusception occurs between the third and twelfth months of infancy. Abdominal pain is the first and most pronounced symptom. Vomiting is also usually prominent. Sudden prostration is common. A lump (either abdominal or rectal) can be felt almost always. Tympanites is rare except very late in the disease. Fever is present in less than half the cases. No attempt at irrigation with earliest possible operation and the least manipulation gives the best results.

HYDROCELE.

All things considered, it is best to advise excision in most cases of hydrocele. Plastic methods (injection of some irritating fluid into the almost emptied sac) are not without danger and frequently fail; though 95 per cent carbolic acid, one dram, is generally regarded as harmless and often cures. But removal of the sac, save enough to cover the testicle, is so perfectly safe in clean hands and so sure—that one should not hesitate to insist upon it as a method of choice.

HOSPITAL SURGEONS.

Professor Bayard Holmes, of Chicago, has very decided opinions about the methods of certain surgeons connected with hospitals. He says (*Journal of American Medical Association*)

Man in health is inhabited as to much of his digestive tube by microscopic vegetable organisms.—Bouchard.

ciation): "To have a fervid religious sect, with a substantial, numerous and loyal hierarchy behind his hospital to sanctify it with devotion and fill it with devotees, and the rich material for its propaganda, is worth more to a physician and surgeon than six columns a week of the most skilful exploitation or of blatant advertising in three

daily newspapers, to the prevention of which method of securing patients our societies and their code of ethics is so strenuously devoted." And there are a lot of others besides Holmes who don't like the idea of a host of "solicitors" going about the country using the name of Jesus to secure business for certain hospital surgeons.

GYNECOLOGICAL NOTES

PSYCHOSES OF PREGNANCY.

In a most interesting article in *Medical Standard*, entitled "The Psychology of Disease," Dr. Mary S. Johnstone, of Chicago (Evanston), says: A curious mental condition, and one that demands our study, is that of the mother about to be, who desires to destroy her child. That same mother will risk her life for her other children, she will love and care for this one as soon as it is born, but now she has no love for it, she can not, must not, have it; she is willing even to risk her own life in order that she may destroy that of her offspring. There is first the sociological "excuse," the mistaken idea that the fetus is not alive until quickening is felt; and second, the custom of regarding destruction of the fetus as a trifling thing—an opinion which is strong and therefore hard to overcome. The laity have not, as a rule, been brought up to consider induced abortion as aild-murder. But is it not more charitable also to search for some physical, some pathological reason for this? We know that at this time the mother cares for two. For many years, those abnormal cravings of the mother have been laid at the door of auto-intoxication. Recently, Dienst of Breslau has pointed out that eclampsia may be due to the placenta allowing the heterogenous fetal blood to reach the maternal

side. May not this abnormal mental state be partly due to an auto-intoxication, dependent upon some condition in the placenta, which allows toxins from that organ, or from the child, to enter the maternal circulation?

VAGINAL DISCHARGES.

A certain amount of vaginal discharge is normal to woman; when free enough to be termed leucorrhea it generally depends upon masturbation or chronic gonorrhea. Sireday, of Paris, has made an extensive study of vaginal discharges and concludes as follows on this subject: In the healthy woman and the young girl there are found nearly always certain forms of long, rod-shaped and thread-like organisms, of which, when the women do not take any injections, there is a veritable host. In women infected by gonorrhea, however, there is present besides the gonococcus a number of forms of micrococci, but no rod-shaped organisms. When the infection tends to become chronic there is a return to the rod-shaped forms. The gonococcus is found in more than one-third of all cases of leucorrhea. In certain women it appears only intermittently, chiefly near the time of the menses. When the leucorrheal discharge is in the stage of amelioration certain substances are capable of pro-

Intestinal fermentation increasing, toxins accumulate till intoxication, despite soundness of renal structure.—Bouchard.

The organism possesses numerous resources enabling man to escape the intoxication always threatened.—Bouchard.

ducing a recrudescence, such as acid injections, and especially solutions of bichloride of mercury. On the contrary, excellent results are obtained from irrigation with alkaline solutions: bicarbonate of soda, borax and boric acid, the reaction of which is not acid.

GONORRHEA IN WOMEN.

For the vulvovaginitis due to Neisser's coccus, Archambault recommends injection twice a day of a quart of 1 to 2000 to 1 to 4000 potassium permanganate, followed by mercury bichloride 1 to 2000, and a dressing of 5 per cent ichthylol in glycerin. Resorcin, in doses of 15 grains, he thinks may be given internally with advantage. Twice a week silver nitrate solution should be used to swab the inflamed mucous membrane, and following this, a powder of alum, 3 parts; tannin, 2 parts, should be insufflated. Frequent bathing and other hygienic means should be employed. If there is complicating cervicitis and metritis, dressings of ichthylol, 10 parts; iodoform, 5 parts; glycerin, 200 parts, should be used. Local applications of tincture of iodine or of zinc chloride, 1 to 50, may be employed, and intrauterine injections of about 1 1-2 ounces of the following solution: alumnol, 2 1-2 parts; tincture of iodine and alcohol, each 25 parts; Intrauterine bougies are useful, as for example, tampons of beer-yeast, which act by liberation of lactic acid. Urethritis should be treated by the balsams, the alkalies, and by irrigations of silver nitrate or protargol solutions, or a 1 per cent aqueous solution of thallin sulphate.

INGUINAL HERNIA OF THE UTERUS.

This is indeed a rare, but interesting condition; thirty-nine cases had been reported up to the beginning of 1906. Another is recorded by Heinrich Hilgenreiner, *Berliner*

A lethal dose of nicotine does not kill if first triturated with fresh liver tissue, but does if with renal or muscular tissue.—Bouchard.

Klinische Wochenschrift, March 12, 1906. His patient, a virgin, aged 53, afflicted with melancholia, had been submitted to a previous operation. The operation was unsuccessful. When she applied to the author for treatment six years later, the sac was found to contain cecum, appendix, uterus and right adnexa. The uterus was densely adherent to the sac. After separation of the adhesions, the organ was fixed to the large inguinal opening, thus acting in the manner of a truss. Recovery was uneventful, and it is peculiar to note that the melancholia disappeared after the operation.

RELAXATION OF UTERUS DURING CURETTAGE.

Any one who has many times tried to empty the uterus after abortion is familiar with the peculiar relaxation of the organ during curettment; and it sometimes occurs during the operation upon a non-gravid uterus. Gussenbrock states, indeed, that usually the uterus relaxes at the beginning of curettment, although he is not sure whether this is due to dilation of the cervix or to the curettment itself. The soft feeling which formerly was supposed to be due to mucous membrane, is due to this relaxation, and the hard, grating sensation, formerly thought to show that the musculature had been reached, is due to the subsequent contraction of the uterine walls. In some cases the relaxation is so extreme that the distance to which the curet sinks suggests perforation, and he reports several such cases, in one of which the sound entered to a depth of 15 centimeters. He warns against mistaking this condition for perforation and interrupting operations unnecessarily, and against the danger of making a perforation in the relaxed wall, which will harden in a few minutes if the operator pauses.

The elimination of poisons by the feces is shown by their fetor in persons who frequent dissecting rooms.—Bouchard.

DEPARTMENT OF
Dermatology, Venereal
AND SEXUAL DISEASES

WITH A REVIEW OF THE LITERATURE OF THE WORLD

In charge of Dr. WILLIAM J. ROBINSON.

Address all communications designed exclusively for this department to
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THE TREATMENT OF GONORRHEA AND ITS COMPLICATIONS

INFORMAL CHATS WITH THE GENERAL PRACTICIAN.

III. THE COMPLICATIONS OF GONORRHEA.

BY WILLIAM J. ROBINSON, M. D.

UNDER proper treatment, theoretical-
ly speaking, there should be no com-
plications. But practice too often
betrays theory, and accidents *will* happen.
Besides, the patient often comes to us with
the complications in full development.
Some of the complications enumerated
below are not really complications, but exag-
gerations of the normal symptoms.

Ardor Urinae.—This is sometimes so
severe that the patient looks forward to each
micturition with dread and tries to delay it
as long as possible. Drinking large amounts
of water, increasing the frequency of the
potassium citrate and bromide mixture to
a tablespoonful every hour for a few hours
and of the hyoscyamine to 1-120 grain
every two hours will quickly overcome the
condition.

Chordee, painful erections.—How excruciat-
ingly painful these may become, every
physician handling genitourinary cases will
testify. The congestion is often so severe
that the urethral discharge and the urine
become blood stained. Prophylaxis is im-
portant. As chordee is often caused by a
full bladder, the patient should drink nothing
or very little after 7 p. m. He should

urinate just before going to bed, and should
sleep on his side, on a hard mattress, with a
light covering. The potassium citrate and
bromide mixture prevent chordee and I have
seldom seen a patient taking that mixture
complaining of chordee. Should it happen,
however, then an additional dose of sodium
bromide, 30 grains, just before going to bed,
will prove useful. In aggravated cases we may be obliged to have
recourse to chloral, and the "compound mix-
ture of chloral and potassium bromide" of
the National Formulary is the most eligible
combination for the purpose. The cannabis
indica which the mixture contains is an
additional advantage.

Where chloral is contraindicated, the fol-
lowing capsules should be given,—they
have never failed in my hands:

Codeinae phosph. ....gr.	1-3	(0.02)
Heroini hydrochlor. ...gr.	1-12	(0.005)
Camphoræ monobrom. grs.	2	(0.12)
Lupulini optimi.....grs.	3	(0.19)
Ext. rhamni purshianæ grs.	2	(0.12)
M. Ft. caps. No. 1. Sig.:	Take one cap- sule before retiring.	

Never prescribe morphine. Besides the
fear of habit creation, its tendency to lock

up the secretions and cause constipation is too great. Even the codeine has a slight tendency to cause constipation, but this is completely overcome by the extract of cascara sagrada which, as is seen, I add to each capsule. Whatever we do in gonorrhœa, we do not want to constipate our patients. A full lower bowel reacts injuriously on the genitourinary organs.

Sometimes suppositories prove the most efficient and the following is an excellent combination:

Codeinae phosph. gr. 1-2 (0.03)

Atropinae sulph. gr. 1-120 (0.0005)

Antipyrinæ gr. 5 (0.3)

Ol. theobromæ gr. 15 (1.0)

M. Ft. suppos. No. 1. Dentur tales doses No. 12. Sig.: Insert one before going to bed; another one may be used during the night.

To relieve the actual attack, the patient should wrap a cloth or towel wrung out of ice water about the member or put it in hot water, as hot as can be borne. If the desire to urinate is present at the same time with the chordee, the patient should urinate in the water. Swallowing pieces of ice has relieved many of my patients, but whether suggestion plays here a part or not is hard to determine.

Posterior Urethritis.—This will form a chapter by itself.

Balanitis or rather *balano-posthitis*.—In cleanly individuals who do not allow the pus to accumulate behind and around the glans, who wash the latter with soap and water, balanitis will not occur. Where it has taken place, the glans and prepuce should be thoroughly washed (but once only) with a 1 to 1000 bichloride solution, and then kept wet with a piece of gauze dipped in a solution of aluminum acetate. The gauze should be changed several times a day. Instead of aluminum acetate solu-

tion, a saturated solution of boric acid or a one-percent ichthyoïl solution or lead water may be used. After two or three days, the wet dressings are generally advantageously replaced by dry powders and as such the best ones are bismuth salicylate, bismuth subgallate, bismuth subnitrate, aristol (thymol diiodide) and airol (bismuth oxyiodogallate). Calomel in balanitis has proved unsatisfactory in my hands. I might add to the solutions above enumerated a 1 per cent solution of resorcin. It sometimes acts magically.

Phimosis.—This is generally the direct result and merely an extension of the balanitis. The principle of the treatment is the same, only as the prepuce cannot be retracted, we must get between the glans and the prepuce with a narrow-pointed syringe and must irrigate several times a day. The patient is best put to bed for two to three days and the penis kept enveloped with gauze saturated with a solution of aluminum acetate or lotio plumbi et opii.

Paraphimosis.—A paraphimosis must be reduced as soon as seen, or dire results—gangrene of the glans penis—may follow. The glans is washed with bichloride and dried; it is then massaged with the two thumbs—the ring and index fingers being behind the corona—until the blood is massaged out of it. It is then anointed with a little oil or petrolatum, quickly pushed behind the constriction and the prepuce brought forward. Should this maneuver fail, a small slit through the constricting band—on its dorsal surface—may become necessary. Of course the strictest antiseptic precautions must be observed.

Lymphangitis.—During the course of an acute gonorrhœa, the lymphatic vessels of the penis occasionally become inflamed; they may be both seen (as red lines) and felt (as hard cords). The penis is to be

Men fatigued or depressed are struck down by conditions that would have produced nothing in healthy men.—Bouchard.

Nerve reaction acts only by rendering infection possible, weakening the defense a healthy organism opposes to microbes.—Bouchard.

kept constantly wet with gauze saturated with a 3 per cent ice-cold ichthylol solution or an ichthylol-belladonna ointment is to be rubbed in three times a day.

Adenitis.—While the inguinal glands very frequently become enlarged during the course of an acute gonorrhea, they seldom attain to the dignity of buboes. Suppuration is very rare. The treatment consists in rest, laxatives, and the frequent application of the following ointment (every three hours):

Ung. hydrargyri drs. 2 (8.0)

Ung. iodi drs. 2 (8.0)

Ung. belladonnae drs. 6 (24.0)

M. Sig.: Apply by gentle friction every three hours and cover with lint and oiled silk. Wash the parts every morning with soap and water.

This is a very strong ointment, because the elementary iodine and mercury unite partially to form the red mercuric iodide. If the skin gets very irritated, the ointment is to be left off for a while and plain zinc oxide ointment or zinc paste is to be applied until the irritation has passed. If suppuration has taken place, then of course there is nothing left to do but to incise the gland and empty the pus.

Folliculitis, Cowperitis, periurethral abscesses, when fully developed, are surgical affections and should be treated as such, i. e., by incision, irrigation and, if necessary, packing. In their initial stage attempts at resolution should be strenuously made, the remedial means being mercurial ointment, iodine ointment, tincture of iodine and ichthylol.

Epididymitis and Epididymo-orchitis.—This is one of the most frequent and certainly one of the most painful complications of gonorrhea. The patient should be given a saline laxative or a soap-suds enema and put to bed. All instrumentation and all urethral injections should cease.

Increasing intestinal or skin secretion we lose water but not the toxins that would have passed out with it by kidneys.—Bouchard.

The scrotum should be supported on a small pillow, on a padded cigar box, or best on a wide strip of adhesive plaster, spread across the thighs. The affected epididymis and testicle should be gently pressed down and the scrotal skin made tense over it, should be painted once with pure guaiacol. This frequently relieves the greater part of the pain. After the preliminary painting, the following ointment should be gently rubbed in. This ointment often acts magically.

Guaiacol dr. 1 (4.0)

Ichthylol dr. 1 (4.0)

Ung. iodi drs. 2 (8.0)

Ung. hydrargyri drs. 2 (8.0)

Atropinae sulph. grs. 2 (0.12)

Adipis lanae hydrosti,

ad drs. 10 (40.0)

M. Sig.: Rub in gently and thoroughly and cover with absorbent cotton and oiled silk.

Instead of the iodine ointment, an equal amount of ung. hydrargyri may be given.

The statement appeared recently in some publications that ichthylol and iodine ointment are incompatible. This is one of the numerous things that appear in print that "ain't so." I have been prescribing the combination of the two for about fifteen years, and have never noticed anything wrong, either in the physical appearance of the ointment, or—what is of real importance—its therapeutic action. The latter is all that can be desired, and fully combines the antiphlogistic and resolvent action of the two ingredients.

An ice-bag applied over the scrotum is often very soothing and grateful to the patient. Some patients, on the other hand, cannot stand it.

Morphine and atropine suppositories may become necessary, or a hypodermic of morphine may have to be given to insure rest

Perspiration of epileptics after fits, and of smallpox cases, is far more toxic than ordinary perspiration.

and sleep. But the morphine should not be given more than once or twice. There are other means at our command, less pregnant with evil by- and after-effects.

Strapping the testicle, especially when the patient is obliged to be about, is often superior to all other measures.

A CASE WITH A MORAL.

I am not in the habit of rushing into print with reports of my successful cases or miraculous cures. But the following case illustrates so forcibly the paramount importance of the internal treatment of skin diseases—a point that cannot be insisted upon too strongly (see our editorial, *The Constitutional Treatment of Skin Diseases*, in this JOURNAL for March) that I am induced to refer to it briefly for the benefit of our readers. It also illustrates another point to which I will refer later on.

A. S., two years and three months old, was brought to me about five weeks ago from a small Connecticut town. His face was a mass of eczema, so that it was impossible to distinguish the features or to say whether it was a boy or a girl. So repulsive was the face that the child was not allowed out by the mother, except when heavily veiled. About one-third of the head was covered with patches of eczema. The arms, hands, lower limbs and about one-fourth of the trunk were covered with eczema in different stages. Some patches were acute and weeping, others were covered with dried secretion, still others, on the anterior aspect of the legs, were of a chronic character, presenting the picture of lichenification. Besides, there were numerous evidences of violent scratching.

The child has had its eczema, according to the mother's statement, from its seventh week. She consulted many physicians and

One of life's greatest tragedies is that every truth must struggle to acceptance against honest but mind-blind students.—Osler.

used innumerable applications. Occasionally there would be considerable improvement, then the disease would break out worse than ever. The parents despaired of ever seeing the child in a presentable condition. It slept badly, restlessly, and ate poorly. I examined the copies of the prescriptions which the mother brought along—all well-known, good applications.

There was nothing wrong with the external treatment. But there was everything wrong with the internal—for there was none. None of the physicians considered it necessary to give the child a thorough examination and see if it did not need something besides the external applications. A very superficial examination would have shown plainly that the child was suffering from suboxidation, from defective elimination, from autotoxemia. The child's nose was completely stuffed up with catarrhal secretion and dried scabs; there was considerable pharyngitis and bronchitis. The cervical, axillary and inguinal glands were swollen and in places tender to the touch. The child was distinctly scrofulous—a term not in favor with ultra-scientific practitioners just fresh from college, but one which to me, in company with Sir Dyce Duckworth and other *clinical* masters, has a very distinct meaning. To anybody who could read signs at all it was plain that the child's system was clogged with suboxidation products, that its eczema was an attempt of nature to rid it of noxious debris—and it did as it always does, through the *locus resistenter minoris*, in this case the skin.

The first thing I did was to order a nasal douche with a mild alkaline wash, with instructions to use every two hours. I ordered the plain, old-fashioned cod liver oil, also syrup of iodide of iron. And then I ordered three different external applications.

And here I want to stop for a moment and

A bookish man may never succeed; his failure is not because he has read too much, but observed too little.—Osler.

emphasize the point to which I referred in the beginning. Every physician knows that eczema may be acute, subacute or chronic, and every physician also knows that the different stages require different treatment. But most physicians fail to bear in mind that a severe case of eczema of long standing may present lesions of the most diversified character and stages and one ointment or lotion will not answer for all.

Thus, in this case, the eczema of the face was of a most acute character; there was severe redness and inflammation and the secretion was profuse. To order any tarry preparation for the face would have meant adding fuel to the fire and to severely aggravate the case. On the trunk the eczema was of a subacute character and on the anterior aspect of the lower limbs of a distinctly chronic character. I ordered for the face compresses saturated in an iced diluted solution of aluminum acetate (solution aluminum acetate 1 part, iced water 2 parts; keep on ice, or put a piece of ice in, every now and then).

This application, which besides its cooling and sedative effect, has also antiseptic properties and is absolutely non-toxic, relieved the unbearable itching at once, so that the very first night the child slept better; it also breathed more easily on account of the cleansing its nose received. For the subacute patches I ordered an ointment of cinnabar (red mercuric sulphide) zinc oxide, bismuth subnitrate, starch, menthol and white petrolatum, which ointment was also later on applied to the face, after the acute phenomena had subsided. For the chronic infiltrated patches I ordered an ointment of resorcin, naphthol, zinc oxide, ol. rusci, lanolin and petrolatum.

Three days later the mother, whom I advised to stay in New York, brought the child again, and the improvement was unmis-

Early learn to appreciate the differences between the descriptions of disease and manifestations of that disease.—Osler.

takable. The facial features could already be distinguished. I told the mother to go home, continue with the treatment and bring the child in two or three weeks. She did so and the improvement at that time was truly remarkable. He was dressed in a boy's suit, wore no veil and was lively and boisterous—something which the mother says she does not recollect him ever to have been. She was profuse in thanks—for she considered the child cured. I do not. I know that a dyscrasia that has lasted from the earliest infancy, practically from birth, does not get *cured* in three or four weeks. I know a skin that has been eczematous for more than two years does not become at once normal and will for a long time remain quite vulnerable to weather and thermic influences and other irritants.

But nevertheless I know that under proper treatment the recurrences will each time be milder and milder in character and will finally cease altogether. And at any rate this case well illustrates what I wanted to illustrate: the paramount importance of constitutional treatment in purely "local affections." For in this case local treatment alone had not accomplished in two years what local *plus* constitutional treatment has accomplished in two weeks.

THE TREATMENT OF PSORIASIS.

Dr. P. S. Abraham, dermatologist, to the West London Hospital (*Brit. Med. Jour.*, April '04) does not believe there is any drug that can be considered a specific for psoriasis. He has little faith in arsenic: he does not deny that arsenic may occasionally appear to benefit a patient—for example as a nerve tonic in cases which have a neurotic complication or that when pushed almost to toxic effect, the eruption may sometimes temporarily disappear; but a similar result has not

The practice of medicine will be very much as you make it—a worry, care, annoyance, or a daily joy, happiness and usefulness.—Osler.

infrequently been obtained by the author during the attack of some intercurrent disease.

Thyroid gland is also of little value. Magnesium sulphate on the other hand, with a little iron and some bitter tonic, is often useful; it regulates the bowels, promotes excretion and improves the general nutrition. Whenever there is the least suspicion of an excess of uric acid, the author gives salicylates, salicin and the alkalies. As regards external treatment, the author's usual plan is to order a thorough soaking for at least ten minutes in a weak tar bath, every day, to be followed by a copious induction with some tarry ointment. One dram of creolin is ordered to six gallons of water in the bath and the ointment has the following composition:

Creolini	dr. 1-2
Ac. salicyl	grs. 10
Hydrarg. ammon.	grs. 10
Lanolini	
Vaselini	aa oz 1

To this the author sometimes adds two or three drams of soft soap and occasionally fifteen grains of precipitated sulphur. Most cases yield to this treatment in a few weeks, but when progress is slow two or three grains of chrysarobin is added to the above ointment. Obstinate patches are rubbed in with a solution of chrysarobin in benzine by the aid of a stiff brush.

For psoriasis of the scalp, the author's treatment is:

Hydrargyri ammon.....	dr. 1
Saponis mollis	
Vaselini, q. s. ad	oz. 1

to which resorcin or some tarry oil is sometimes added.

CAN SYPHILIS BE RADICALLY CURED?

How often do we hear that question! The syphilitic patient takes his disease seriously.

It is a common error to think that the more a doctor sees the greater his experience and the more he knows.—Osler.

He is willing to undergo any amount of treatment, any hardship, only to be cured. But he wants to know—can it be cured? He wants to know that all his trouble and expense will be rewarded by permanent freedom from the symptoms of the disease, and we are therefore frequently confronted with that question: can syphilis be cured?

Prof. Alfred Fournier who has probably seen and treated more syphilitics than any man living, has recently published a little brochure for the laity entitled, "*En guérison?*" which may be translated: "Can it be cured," or "Does one ever get cured of it?" According to the author's extensive statistics, ninety-five to ninety-seven per cent are permanently cured if properly treated. Not more than from three to five per cent of all cases of syphilis, which have been submitted to a thorough and prolonged course of mercurial treatment, by which the author means a course extending over a period of three years, are likely to develop any evidence of the disease either of syphilitic or parasyphilitic nature. The author's confident answer therefore is, that except in a very small proportion of cases, the disease can be so far eradicated, that not only the individual can consider himself free from the disease but that he need have no fear of imparting any taint to his wife and children.

And that is what we have been telling our patients right along.

SYPHILIS AND LONGEVITY.

Dr. Leonard Weber of New York (*Amer. Jour. Dermat.*) considers the subject under the following headings:

1. The influence of mercurial treatment in preventing tertiary and parasyphilitic lesions.

From the earliest to the present times of the study and observation of syphilis and

During the past 4 years 949 men have been dismissed from navy service for venereal disease.—Harmon, *N. Y. S. J. M.*

the remedies for the healing of its secondary symptoms, it has been shown that mercury is the best remedy to heal and safeguard the patient against tertiary and parasyphilitic lesions. Mercurial inunctions and solutions of corrosive sublimate by the mouth, have very properly superseded the pill treatment with iodide of mercury, hydrargyrum cum creta or calomel; and quite recently the hypodermic injections of emulsions of the insoluble salts of mercury, particularly salicylate of mercury, are being preferred by many practitioners. The results with the latter are not only equal to the inunctions, but oftentimes better, particularly in refractory cases. No other remedy has as much power for taking out the sting, so to speak, of the syphilitic virus and guard against the later development of specific arteriosclerosis, which may be considered the basis of the heart and the nervous system.

2. Do the severity and persistence of the secondary symptoms afford a guide as to the probability of subsequent tertiary and parasyphilitic symptoms?

They do not; the author has seen cerebral hemiplegia within three years after infection and after energetic treatment of the more or less severe manifestations of the disease, but also in cases which were so light as to receive but perfunctory or no constitutional treatment at all. Optic atrophy with and without tabes, oculomotor palsies, epilepsy and tabes have occurred in his observation more often in syphilis with an obscure history, and consequently little if any appropriate treatment, than in well marked and carefully handled cases. This also holds good with regard to paresis.

3. The patient's constitution.

As to the physique of the syphilitic, the naturally healthy and vigorous young person will, *ceteris paribus*, have a better chance to be cured and remain free of tertiary lesions

About 80 per cent of the candidates for army or navy medical corps are rejected, failing usually in the practical tests.

and live to green old age than the feeble, lymphatic or otherwise tainted individual.

4. Indulgence in spirituous liquors, etc.

Excess *in baccho* is known to be the most dangerous ally of syphilis and more apt to shorten life in conjunction with it than any other bad habit. For instance, a male, aged 46. When he became infected, he continued his frequent excesses to which he was addicted for a number of years before infection, and two and one-half years after he had a violent attack of cerebral hemiplegia, followed by but partial physical recovery and permanent mental imbecility.

5. Advanced age and post-syphilitic anemia.

A man who is so unfortunate as to contract syphilis after fifty, has brought upon himself a malignant disease, so far as the author's experience has shown in a limited number of cases. Three cases of which notes were made died of visceral syphilis in less than six years after infection.

Post-syphilitic anemia in middle-aged persons, who give a history of syphilis, deserves much more inquiry than it has generally received. The neurasthenia-neuralgic stages in which we find such persons are oftentimes not the result of specific lesions, but of anemia, and will yield much better to Blaud's pills than to the iodides.

6. Statistics.

It is to be regretted that there are not many nor extensive statistics available with regard to the influence of acquired syphilis upon shortening life's tenure.

Of the 150 cases of syphilis referred to by the writer in a paper entitled "Locomotor Ataxia and Syphilis," published in *N. Y. Med. Record*, April 5, 1884, and of about 100 more cases of syphilis of which he has kept notes since that time, he is able to show that life has been shortened in about 5 per cent of the entire number, that is to

The medical teacher needs to keep track of what each student knows and does not know, throughout the year.—Cabot.

say, the 5 per cent who are dead would very probably have lived longer had they not had syphilis. And further, he has made memoranda of the mortality tables from one old-established life insurance company, "Halcon," in Helsingfors, in Finland. Prof. Runeberg of the University of Helsingfors reports in a recent paper on the subject of syphilis of the heart that out of the number of 734 deaths of those mortality tables, there were 84, that is 11.4 per cent, that died of diseases directly or indirectly 'caused by syphilis, and that all these 84 died ten and twenty years before the estimated limit of life.

TREATMENT OF EPITHELIOMA WITH CAUSTIC POTASH.

Dr. Arthur Van Harlingen says (*Jour. Cut. Diseases*, Aug., 1906) that the excellent results obtained in most forms of epithelioma of the skin by the use of the x-rays do not exclude the employment of older forms of treatment in cases where the latter give a more rapid and satisfactory result. The caustic which gave the author the best results is caustic potash (KOH). It dissolves the horny layers of the skin, lays bare the diseased tissues and while destroying everything indiscriminately can be accurately limited in its effects. The pain is not too severe for most patients to endure; it need not be prolonged and can be arrested at any moment by the use of a neutralizing agent, as acetic acid. The only caustic which can be compared with potash as to efficiency is arsenic, but the arsenical pastes are likely to give rise to general and prolonged pain.

The author gives brief illustrative reports of fifty-five cases and reaches the following conclusions:

1. In a certain number of cases epitheliomata of the skin are best treated by means of caustic potash.

There are country doctors among my friends with whom I would rather change than with any in our ranks.—Osler. (Alkaloidists?)

2. These cases comprise such as show well defined pearly lesions, from one-half to one or even two centimeters in diameter, chiefly upon the face and adjacent parts.

3. Larger lesions are best treated by the x-ray, but here caustic potash may be used to soften and dissolve the horny epithelium and perhaps in some cases as an adjuvant.

4. In cases treated by caustic potash, the use of the x-ray does not appear to hasten the process of reparation or to modify to any marked degree the cicatrix resulting from cauterization.

AN EXCEPTION TO COLLES' LAW.

Dr. W. A. James (*Intercolonial Med. Jour. of Australasia*, through *Med. Rec.*) reports the following case: The patient, a woman 39 years old, when first seen by the writer had an ulcer on the areola of the right breast and there was a large tender gland in the axilla. The patient's baby had bitten her some days before. The wound healed in about five days, but seventeen days after the bite, a blister appeared at the old wound, which in three days broke and became painful. Rapid ulceration set in and a week later the patient had a typical roseola rash on the chest and back; the hair fell out; there was hoarseness, mucous patches appeared on the inside of the cheek, tongue and lips; pain in the jaws, some bone pains, tenderness over the sternum, and general glandular enlargement developed. Mercury was begun, and a few days later a papulo-squamous rash appeared on the legs and arms especially. A superficial reniform ulcer developed on the right tonsil. The baby also showed definite signs of syphilis. All of the medical men who have seen these cases agree that the mother is a secondary syphilitic, and that the child is a congenital syphilitic. The writer holds that this case is an undoubted exception to Colles' law.

An unidentified German says music during anesthetization prevents nausea.—*Med. Mirror* Swiped from Ephraim Cutter.

GLEANINGS FROM FOREIGN FIELDS

Translated by E. M. Epstein, M. D.

ARBUTIN IN PYURIA.

II.

IN these three great varieties of renal-arterial infection the kidney is not increased in size. In the last variety we have to deal either with a simple pyelitis or with a pyelonephritis, which is an infection of little severity on the border between medicine and surgery. Later on the suppuration increases and so does the volume of the kidney, and then we have a pyonephritic sack, and the kidney is no more than a shell without parenchyma and full of pus. In case of tuberculosis we operate at present before it comes to this stage, at the period of granulation or of caseous cavities opening into the renal pelvis.

It is very important here to recognize the character of the pus. In the kidneys of aged urinary pyelitic patients there is troublesome polyuria with turbid pale urine, without chromogene, and a low rate of urea and chlorides, showing a weak organic metabolism. These are patients of feeble vital resistance. [The turbidity of the pale urine must be owing according to the author to a weak kind of pus in it.—TRANSLATOR.]

On the contrary in stout patients with pyelonephritis or pyonephritis we see greenish, dense and concrete pus precipitated to the bottom of the urinary vessel, two or three fingers' thickness, and mixing with the urine with difficulty.

The histological examination of these urines is of interest, especially for those who investigate specific elements, e. g. cylinders in changes of parenchyma, spindle-shaped cells (*Cellules en raquettes*) from a suppura-

ting renal pelvis, the bacillus of Koch, or better also the deformation of the erythrocytes in tuberculous suppuration.

As to albumin it must be carefully noticed that it is present in all pyuria but only in small quantity, some centigrams or rarely some grams per liter, and the interest is to find out whether the albumin comes from the leucocytes and not from an essential renal albuminuria necessitating a milk diet. It is on this account that the physician must first carefully observe, himself, the color of the urine before he sends it to the chemist, to assure himself of its limpidity or turbidity, so that he would not condemn the unfortunate tuberculous patient to an exclusive milk diet who is rather in need of superalimentation.

All these questions in renal suppuration are of great importance where we have to ascertain whether we have a common or a tuberculous suppuration before us, for in a great majority of these cases the welfare of the patient depends upon a well-applied therapy.

From the above rapid review the physician can learn of the variety of causes, all of which tend to a pyuric syndrome, and it should give him a clearness in making a diagnosis as to its locality in the different segments of the urinary apparatus.

In most cases which we reviewed, even those which at first sight seem to belong solely to surgery, even in these the physician should, before adopting extreme measures, always try the remarkable action of arbutin.

The first experience of him that resorts to the use of arbutin is that it is non-toxic. Thus Jablonski gave twenty grams of arbutin in forty-eight hours without noticing the least toxic phenomena. It has no bad action on the digestive tract, whatever the dose be.

By its decomposition within the system into hydroquinone it possesses remarkable antiseptic, antiputridic and antizymotic properties, while it is diuretic at the same time. As its elimination is principally by the urine it naturally exercises its special antiputridic and antiseptic action on the kidneys and bladder.

The action of arbutin resulting as it does from its decomposing into hydroquinone, one might ask, why not give hydroquinone directly? But this does not hold good, for arbutin owes its efficacy to its being decomposed, as Sendin showed, within the body. The soluble arbutin acts only by its splitting in the presence of dilute acids, or in an emulsion of hydroquinone (Hlasiwez and Haberman).

It is shown that splitting takes place in the bladder (Dr. Landin), and is non-toxic, for two reasons: (1) Arbutin holds but very little of it; and (2) hydroquinone changes in the kidneys and bladder into hydroquinone-sulphuric acid which is inactive.

It is for this reason that even a small dose of arbutin is sufficient to keep up in the bladder continually this invaluable hydro-chemic splitting, the continual contact of which with the mucosa of the sick organ must be of supreme value in the therapy of the urinary passages. Strong doses are not necessary and only small doses of the remedy frequently repeated every hour or two in order to keep up its beneficial action.

Houde's arbutin granules are of four centigrams (gr. 1-12), and are given one or two about every two hours during the day, and at night only when the patient wakes to urinate.

Many unbelievers in vaccination, vivisection, and the mosquito theory believe in wine of cardu and peruna.—*Med. Mirror.*

Houde's dose for twenty-four hours will vary from 0.60 to 1.20 (gr. 9 to gr. 18); small doses may not show the antiputridic effects sufficiently, especially in severe cases, and large doses of 1.20 (gr. 18) are useless but not dangerous.

(Translated and somewhat abbreviated by Dr. Epstein from Houde's *Revue Therapeutique*, Juin, 1906.)

SCOPOLAMINE IN ANESTHESIA.

M. Routier said before the Societe de Chirurgie (March 28, 1906) that he used scopolamine in connection with chloroform in a number of cases especially in two aged patients, one of sixty-one and the other of seventy-two years of age. He does not believe that scopolamine modifies much the chloroform anesthesia. Patients react so differently to anesthetics, especially to chloroform, that it is very difficult to establish any precise rules of anesthesia. Patients who underwent anesthesia a number of times supported chloroform the first time very well and very badly another time. To what extent scopolamine may modify the action of chloroform it is difficult to say. The same is true with reference to cardiac effects. M. Routier operated on a case with appendicitis in whom Potain found tachycardia, yet he advised chloroform anesthesia and also assisted in the operation. The pulse which was 150, fell to 80 during the anesthesia, and continued after it below that. This took place without the help of any alkaloid. M. Routier had used Ricard's apparatus for one year and did not find that it diminished either vomiting or excitement.

M. Terrier made use of scopolamine since the last report he made of it, in combination with one centigram of morphine in seventy-one cases of full anesthesia without the least incident. He mentions one pa-

R. J. Smith begins preventive treatment of uterine inertia before the sixth month, with tonics and eliminants.—*Med. Mirror.*

tient whom he put to sleep three times, first with chloroform for an appendicitis operation, and the second time he used scopolamine in operating for salpingitis. The first time there was incessant vomiting, the second time she stood the scopolamine well and there was no vomiting. This woman was greatly troubled and especially with vomiting fifteen days before the operation, and the new anesthesia with scopolamine cured her of both.

M. Chaput used scopolamine twenty times in conjunction with ether and also with ethyl chloride. The scopolamine with ether seemed to have the benefit of drying the bronchi and so prevented the bronchial catarrh so likely to be provoked by the use of ether.

M. Monod reported one case of death, which M. Walther charged rather to the chloroform than to the scopolamine. But M. Monod rejoined, that while he saw many alarming symptoms from chloroform he never saw anything like those in the case reported.

M. Segond spoke in relation to the facts resulting from scopolamine. At first he used hypodermics of three milligrams every hour in order to operate without chloroform, and was embarrassed extremely with hemorrhages, a strange kind of sleep and incoordinate movements. He, therefore, abandoned this way of using scopolamine and began to use it in connection with chloroform. He used it specially in nervous females who have to undergo severe operations and are much frightened. He confirms all that M. Terrier affirms, viz., suppression of apprehensions before and of pains after the operation, things that are so valuable in vaginal hysterectomy, and less consecutive vomiting. All in all, M. Segond considers this method of anesthesia a most excellent one, especially in nervous and alco-

holic patients.—*Gazette des Hopitaux*, No. 38, 1906.

THE HEART OF RAMSES II (SESOSTRIS).

M. Lortet reported the following to the "Academie des Sciences" at its meeting of April 2, 1906.

Some months ago the administration of the Louvre museums, after many difficulties, secured four canopic vases containing the viscera of King Rameses II, the Sesostris of the Greeks. These vases carry on their sides in blue enamel admirably executed grand cartouches representing the names and attributes of King Rameses.

M. Lortet, assisted by Profs. Hugonneng, Renaud and Rizaud, succeeded in examining the contents of the vases. He found three of these vases filled with linen bandlets very much pressed and stuck together by means of natron and aromatic resinous substances of a reddish color, which enclosed most probably the stomach, intestines, and liver of that great king. These viscera presented no more than indeterminable granular substances mixed with a great quantity of pulverulent natron.

One of these vases, however, whose cover might have carried the head of a jackal, contained the heart of the monarch. This organ is transformed into an oval plate eight centimeters (3.2 inches) long and four centimeters (1.6 inches) broad. The substance of the heart had become very hard and horny. It was necessary to use a saw in making sections, and then it was possible to make a fine enough cut with a razor for microscopical examinations. It was seen, then, that this horny substance consisted of well formed muscular canals (*fistules musculaires*) perfectly recognizable, interlacing and in bundles as do always and only those of the heart, unless it be those of the

If the os uteri fails to dilate soon, give caulophyllin every ten minutes in hot water, six doses.—R. J. Smith. *Med. Mirror*.

Gelseminine is indicated in rigid os with dryness, to relieve nagging pains and nervousness.—R. J. Smith, *Med. Mirror*.

tongue (where the bundles of its three layers recross each other). And since the tongue of Rameses II can be seen in his mummy which is preserved in Cairo, Egypt, there can, therefore, be no doubt that the piece found in the canopic vase is really his heart, flattened down and transformed into an horny substance by its long uninterrupted contact with natron.

King Rameses II died 1258 B. C., which makes it three thousand, one hundred and sixty-four years since his heart had been embalmed in natron mixed with aromatic resinous substances; and yet, despite so many cycles past, the anatomic texture of the organ is wonderfully preserved! [An animal immeasurably older than Rameses II, viz., the hairy mammoth, found imbedded in the ice of Siberia, had its flesh fresh enough in the 18th century to feed animals with, and some say even human beings cooked and ate of it. The forms once impressed upon matter by what we must acknowledge with the designation of vitality will persist there is no telling how long if but decay is kept away from it. Hurrah for Life!—GLEANER.] *Gazette des Hopitaux*, p. 499, 1906.

STYRACOL, AS AN INTESTINAL ANTI-SEPTIC.

A combination of cinnamic acid and guaiacol, in colorless, needle-shaped crystals, melting point at 266° F. Soluble hardly in water, better in alcohol, and tasteless. It contains a large quantity of guaiacol and is not toxic. It does not dissolve in the acid of the stomach, and medicinal doses are absorbed completely in twenty-four hours. It is therefore highly recommended by H. Engels of Berlin, Germany, where an intestinal antiseptic is indicated, not only in bowel troubles, but also in tuberculosi.

J. W. Bryant reports 4 cases of asthma in which great relief was obtained from atropine, exceeding morphine.—*Med. Mirror*.

The dose is grs. 4 1-2 in twenty-four hours for nursing infants; 7 1-2 grains for older children, and 15 grains for adults during the same time.—(C. H., 1906, p. 388.)

OXYCAMPHOR.

Oxycamphor and its fifty per cent alcoholic solution, oxaphor, are gaining high encomiums as a simple antidyspnea remedy in almost all cases, but especially in nervous asthma. To be able to relieve a dyspneic patient from his or her agony without inflicting the effects of opium and belladonna derivations in lieu, what a boon? Besides, there is such a euphoria after it. Dose of the oxycamphor, ten to fifteen grains t. i. d.—W. M. W. S., No. 16, 1906.)

SUDDEN DEATH FROM STATUS LYMPHATICUS.

Doceat Dr. E. Hedinger writes in the *Deutsch. Arch. fuer Kl. Med.*, 1906, 1-3, about the frequent occurrence of death from the cause in the title, and relates the instance of a family in which four children had died at the ages between three and six years with the symptoms of sudden cyanosis and asphyxia, and then the fifth child, six years old, died with the same symptoms. The post mortem of this child showed a clearly pronounced case of status lymphaticus, and the presumption is natural that there was a similar predisposition in the other children which caused their sudden death.—*Wiener Med. Wochenschr.*, No. 7, 1906, p. 333.

Corosuccin, a new antiseptic, consists, according to Drs. A. Babesh and F. Begnesco (*Bul. de Farm. si chim. Rom.*), of equal parts of a 1 1-2 per cent of a solution of succinic acid and a solution of sublimate 1-1000.—(Ph. C. H., 1906, p. 258.)

The *Medical Mirror* says a doctor is needed at Rollins, N., C. there being none within 6 miles. Tell us of openings.



MISCELLANEOUS ARTICLES

HALF MEASURES WILL NOT CURE TYPHOID.

I AM having much work with typhoid fever. I have been reading up in recent works the doctrines of many, in search for a successful remedy to abort or cure it, and have found none. The disease is self-limited, in spite of any form of treatment that I can give. I clean out with calomel and salines, push sulphocarbolate at same time, naphthalin and again other antiseptics between doses. I have tried aconitine to cool fever, and aconitine is of no value in the battle. The drugs taught by CLINICAL MEDICINE will not abort or cure a case in my hands. On it goes to its full time.

The sulphocarbolates *may* be of some value. Acetozone, salol, the naphthols and other antiseptics all seem to modify the toxemia to some extent, but they all lack the power to cure or hold up the disease. These cases and the full treatment I have given them make me very doubtful as to the abortion and cure of typhoid by any means now known. I am doubtful as to the sulphocarbolates, for even in infantile diarrhea it is cured as promptly without sulphocarbolates, and I have not seen that they are of much value or help. I have tested it both ways, with and without it.

Sulphocarbolate of zinc may part with some of its phenol, but it does not show it in the urine in any size dose, but this modified sulphate of zinc often disturbs the stomach, causing vomiting, etc., and the sulphuric acid in it cannot equal sulphuric acid itself. Now in chronic diarrhea, chronic dysentery, chronic colitis, catarrhs, etc., sulphuric acid will positively cure, for I have been for fifteen

years curing such cases and nearly every case had been treated for months by from one to six doctors who had failed, while in these chronic bowel diseases I do not fail in more than one in twenty.

I never have seen or heard of a physician using this treatment; and again, but few of these cases are cured by other forms of treatment so far as I can find out. The country has thousands of cases of chronic dysentery, diarrheas arising from typhoid that never get well, colitis, etc., that set up these chronic diarrheas that continue for months or years; also summer diarrheas of children, that I have seen and treated, whose diarrheas had continued for three, four or ten months. They all get well and fat with this treatment. I have treated many cases from a distance, with "dead shot" success.

If there be a great healing power in the sulphocarbolates it is positively in the sulphuric acid it contains and that is too feeble, I fear, as I cannot get results out of it. The phenol is antiseptic so far as it goes, and there it stops. I am about satisfied concerning the sulphocarbolates. I am willing to receive all the help from every source for the benefit of the sick. The above is some of my observations and test with the sulphocarbolates and failure to shorten even one case of typhoid fever, and I have never seen any other doctor abort a case anywhere.

I. N. MEYERS.

Speedwell, Tenn.

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The writer, like so many others, has, unfortunately, tried to abort "typhoid" with-

MISCELLANEOUS ARTICLES

out grasping the underlying idea which influences the positive therapist. He has given aconitine, but not at the right time or in the proper way; he has used the sulphocarbonates, not "to effect," but in conjunction with other entirely incompatible remedies; he has forgotten, apparently, the initial mercurial and podophyllin, and not one mention does he make of echinacea, nuclein, enemata, limited diet, sponge baths or any of the several "indicated remedies" which are essential! We could so exhibit salines, the sulphocarbonates, aconitine and naphthalin as to lose every case; on the other hand we can, by following the method so often explained, either cut short or promptly control nine out of ten cases of enteric fever. Of course if we are called when the disease has secured a firm grip, when systemic toxemia is profound and local lesions extensive, we are going to have trouble; but once people are familiar with the fact that Dr. So-and-So cures typhoid they send for him just as soon as the symptoms become evident.

That typhoid *can* be cut short is proved by the fact that hundreds of doctors *are* cutting short the disease—aborting it often, controlling it always! The only thing necessary is to know *what* to do, when to do it, and to give the proper remedies to effect, no matter how much or little is necessary to secure the desired result. Last week the writer was sent for to see an aged doctor who had returned from Omaha with all the symptoms of typhoid. He had had marked rigor, flushes, severe headache, diarrhea and pain in limbs. Temperature, morning, 101° F.; evening, 102° plus. On examining tongue it was found heavily coated and the pain in head was intense; gurgling in right iliac fossa and marked tympanites. Five "rose spots" were found by attending physician (we were called in by the patient) who met us at the bed-side and called our attention to

A man took 2 oz. laudanum; after 6 hours' washing out the stomach recovered 3-4 of the quantity swallowed.—Bouchard.

them. His diagnosis was "typhoid;" it was correct. He wished to get the case off his hands and said so, adding: "This will be a tedious matter as the man is worn out and old—I don't care to take the responsibility." He had been giving salol and turpentine emulsion. Quite "regular," though a little old-fashioned!

We took that man and washed him out with high antiseptic enemata and pushed echinacea with brucine and cactin, allowing only albumen water and barley water with beef-juice as nutrients. The sulphocarbonates were given (after calomel, gr. 1-6, podophyllin, gr. 1-6, iridin, gr. 1-6, had been exhibited every hour for four doses and followed by a saline) every three hours in ten-grain doses, in solution, and they were kept up till stools were first black, then brown.

In twenty-four hours the tongue was clean, tympanites gone; patient had no pain or headache. Temperature, 99° F. It never rose above it again. Next day the "old, worn-out man" wanted to eat. He didn't, but he did go home in just one week and have chicken breast and a baked apple for lunch! He is today about the house, "feeling fine." Of course he was watched and each symptom met as it appeared.

This just as an illustration. The eliminative measures, the daily sponge with epson salt solution, the use of non-irritative food and support of patient's vitality with intestinal antiseptics (rational medication) will cut short typhoid fever. We have proved it by taking cases selected by others and treating them our way while other patients in same condition were treated by older methods. Ours went home when the others were about ready for the "crisis" or lay, picking at the bedclothes, with the Grim Rider plying the whip.

Oh Doctor! don't try to blind yourself to the greatest advance in medicine for the

Cheyne, injecting proteus vulg. cultures in rabbits found fewer than 18,000,000 seldom caused any effect.—Bouchard.

past fifty years. "Take hold," read up and perfect yourself; then diagnose closely, treat conditions, not disease names, and exhibit the indicated remedies in small repeated doses to effect. It may take four one-grain doses or twenty ten-grain—but, *get effect!*

When you give naphthalin with the sulphocarbonates you are simply doing the wrong thing. The difference between an astringent alkaline salt and sulphuric acid is also self-evident. No one denies the efficiency of dilute solutions of sulphuric acid in certain enteric disorders, but any physician who has even a bowing acquaintance with the chemistry of the sulphocarbonates will realize the vast difference in the physiological action of the two remedies; and if the doctor will take an hour or two and read up on phenol (and its derivatives), sulphuric acid and the sulphocarbonates of lime, zinc and soda, he will probably find that his ideas regarding the action of the latter salts are slightly askew.

We are not familiar with a recent textbook on *Materia Medica* which fails to mention the sulphocarbonates as "effective intestinal antiseptics," and numerous modern writers recommend their exhibition. That there are "sulphocarbonates and sulphocarbonates" (those of the market being as a rule absolutely injurious) we know and have frequently stated, but when pure, these salts are far and away the most efficacious and at the same time the least irritating to diseased mucosa of all available antiseptics. Naphthalin has long since been discredited; guaiacol is inferior to the mildest sulphocarbonate and sulphuric acid is not, we think, used to any great extent by well-read practitioners.

The emptied bowel is easily kept clean; he who makes the error of trying to disinfect a loaded intestine must not condemn his antiseptic if he experiences failure. We trust those who are trying the alkaloidal

Of *staphylococcus pyogenes aureus* a billion had to be injected into a rabbit to cause fatal illness.—Cheyne.

method of treating typhoid will institute the entire treatment (not a part of it) and so obtain an entire success. We are here to help anyone who needs suggestions.—ED.

TYPHOID FEVER VS. AUTOTOXEMIA.

Thursday, July 31, at 9:30 p. m., I was called to see Mr. P., farmer aged about 25. Telephone message said he had typhoid fever. Upon my arrival at the house an hour and one-half later, I found him well-nigh frantic with a most terrific headache, tossing and rolling from side to side and apparently in great agony. The history was obtained from the wife and brother.

On Sunday the 29th, he had been to town and got medicine from a physician for his headache, which he had had then for a week or more. On Monday he was still able to be around and attend to his work, but on Monday evening his head became very much worse and he was unable to sleep any that night. The next day, Tuesday, they called in another physician and he told them he had typhoid (for which he is not to blame, because he is not an alkaloidal man and doesn't know what may be done with a few well directed doses of the active principles) and I don't blame him much, for the symptoms were certainly in favor of that diagnosis.

Upon examination I found the pulse 60, temperature 102 1-2° F. Tongue coated heavily with dry brownish coat, breath very foul, eyes congested and very painful to the touch. Temples very sore and tender. Abdomen slightly tympanitic. Note that pulse was subnormal.

After I got through with the examination, his wife said, "Doc, is it typhoid?" I mentally took a long chance on what I had in my case and said very promptly: "No, it is not typhoid, but it is autotoxemia," and explained to them what I meant by that.

Urine is the most efficient of diuretics; distilled water is not to be compared with it, or in lowering fever.—Bouchard.

I put him on calomel, 1-2 grain, podophyllin, 1-6 grain, one each every half hour till six doses were taken. Intestinal anti-septic, W-A, one every hour and aconitine two, with emetine two, dissolved in twenty-four teaspoonfuls of water, teaspoonful every hour. With no further instructions I left him for the night.

Wednesday, August 1, I saw him about 11 a. m. He had not slept any during the night; facial expression about the same as the night before. Bowels had moved three times; tongue moist and coated less. Headache gone, except through the temples. Eyes still very sore. Temperature 102° F. Pulse 72. Not so restless. I continued the same treatment, giving calomel and podophyllin that evening as I had the night before.

I saw him again, Thursday, the second, at 12 noon. Temperature 101 4-5° F., pulse 72. Headache still through temporal region; eyes less painful to touch and not so congested. Tongue clearing up nicely, asking for something to eat. I used the same treatment, except using dosimetric trinity in place of aconitine and emetine.

At my next visit which was Saturday the fourth, about noon, I found his temperature 99 1-2° F., pulse 72. Tongue nearly clean. Had slept well the night before, headache gone, except on sudden movement of head, when he would feel some soreness through the temples. I left him some intestinal anti-septic and the same dose of calomel and podophyllin as at first, to be taken t. i. d. I saw no more of him until the seventh, when I met him at his brother's who lived about two miles away. He said he was feeling fine and was eating everything in sight. No food was given during the time except a little milk on Friday and Saturday. The result of treatment in this case was very gratifying to me from the fact that two other

On an average of 2 days and 4 hours a man makes a mass of urinary poison capable of intoxicating himself.—Bouchard.

physicians had had a chance at it and one at least had pronounced it typhoid, which it would probably have been, as far as duration is concerned, had he had the old line treatment.

But what's the use of talking about these kind of cases? Everybody can get just as good results if they will only use common sense in diagnosis and the alkaloidal system in treatment. "Clean out, clean up and keep clean." Would have used saline laxative in this case if I had had it.

A. D. CAMPBELL.

Richland Center, Wis.

THE DIET IN TYPHOID FEVER.

I have seen a great many articles in the medical journals about the treatment of typhoid fever—how we should "clean out the alimentary canal and keep it clean" by the use of sulphocarbonates, saline laxatives, etc. with all of which I fully agree. But, how little we see about the proper diet in typhoid fever!

This topic, being so conspicuous by its absence, has induced me to attempt to offer a few thoughts on the above subject. I well remember when a student at Ann Arbor, Michigan, the order of Dr. F. G. Novy to our class to "go to town and buy two pounds of beef." We were taught how to make "bouillon" of this beef. It was put into test tubes and sterilized. Sweet milk was treated in the same way. We were taught that these two media were excellent culture media in which to develop pathogenic germs, provided they (the media) were made either neutral or slightly alkaline before we inoculated them with the microbes, but were worthless if of acid reaction. We were also shown how to demonstrate this fact by the hanging drop under the microscope.

But what has all this to do with diet in

The urine of sleep though richer in solids is almost always less toxic than the urine of waking hours.—Bouchard.

typhoid fever. It has very much to do with it if we could remember to apply it when we are prescribing the diet for our typhoid cases. Imagine the intestinal canal to be a test tube slightly elongated. Recollect that bouillon and sweet milk are excellent culture media for the development of the typhoid fever bacillus if not acidulated. Then in prescribing the diet for a typhoid fever patient we would carefully exclude all soups of meats of all kinds, all sweet milk, and all other foods that would form favorable soil for the development of the specific germ of typhoid fever.

But you may ask, "What shall we feed our typhoid fever patients if you exclude sweet milk, beef tea, broths of beef and poultry?"

For the last ten years I have administered fruit juices and fruit soups with the most gratifying results. The best of all is the juice of grapes, the tartaric acid of which is very detrimental to the growth of the bacillus typhosus, some apple sauce, lemon juice, sour buttermilk, etc. By using a little care these juices may be changed frequently in order that the patient may not tire of them. They are very grateful to the patient, they are refrigerant, they inhibit the growth of microbes, and above all they nourish the patient while they starve the germs and allow the patient to be up and at his business in from four to eight days instead of being confined to his bed as many weeks. Try the plan and you will never regret it.

D. W. REED.

Greeley, Col.

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Dr. Reed's suggestion is an excellent one and we hope will be put into practice by many of the "family." Many a failure in the treatment of typhoid is due to either insufficient feeding or harmful food. The

The urine formed during the day contains a principle that induces sleep; during sleep a convulsant that wakes.—Bouchard.

acid diet is certainly rational. Try it—plus the "clean out" and sulphocarbolates.—ED.

TREATMENT OF INTERMITTENT FEVER.

Intermittent fever is a very common disease in this locality as well as many others, and the treatment of it is very interesting as well as important. In the beginning of intermittent fever in sthenic cases where the pulse is full, an emetic of lobelin is very important. Stubborn cases of intermittent fever as well as various other diseases should also be begun with an emetic of lobelin. When it is desired to give an emetic of lobelin, one granule, gr. 1-12, should be given in an ounce of hot water every ten minutes and repeated until the patient vomits nothing but water, which will show that the stomach is empty. After the patient is through vomiting he will feel much better and the entire system will be aroused and prepared for the action of other indicated remedies.

After the emetic (or if it is desired not to use the emetic) the liver should receive attention and for this purpose one granule each of calomel, gr. 1-6, iridin, gr. 1-6, podophyllin, gr. 1-6 should be given every half hour until six doses are taken. This should be followed with saline laxative and intestinal antiseptics and repeated each day until the tongue is clean and the liver active. In some cases much larger doses of purgative should be used and when this is the case the following should be used: Calomel, grs. 30; sodium bicarbonate, grs. 15; podophyllin, gr. 1. M. Sig. Divide into four doses and give one every hour until all are taken. This should be followed with saline laxative and intestinal antiseptics.

In some cases vomiting will be severe and it is impossible to get ordinary remedies to stay down. When this is the case the above formula can be used, as calomel in large

The toxicity of 24 hour urine is less than that of day or night urine when taken separately, one antidoting the other.—Bouchard.

doses is very essential. I have given an eleven year old child twenty grains of calomel at one dose. I believe in "dose enough" in all cases.

A hypodermic of morphine and atropine should be given hypodermically and a fly-blister put on the pit of the stomach and on the fourth and fifth dorsal vertebrae. This may seem like heroic treatment but it will do the work. After this the antiperiodic can be used. I have never found one superior to the following: Fluid extract gentian, drs. 4; fluid extract hydrastis, drs. 4; fluid extract cascara, drs. 2; salicin, grs. 20; tinct. myrrh. comp., dr. 1; simple syrup, ad ozs. 8. M. Sig.: To keep a chill off give one dram every hour until six, eight or ten doses are given, beginning so the last dose will come one or two hours before the chill is due. This should be used this way before about three or four chills. At other times give a dram every three hours. This will surely do the work if preceded by a good cathartic that will thoroughly arouse the liver. I have used it in a number of cases without being preceded by a cathartic with good results but find it best to first use a cathartic.

If the physician is hide-bound to quinine and don't believe that there is any other antiperiodic except it, as is the case with a few narrow-minded, poor observers, he can use the following, which will give better results than quinine alone: Quinine, grs. 72; acetanilid, grs. 48; capsicum, grs. 24; caffeine, grs. 12. M. Sig. Divide into twenty-four doses. To keep the chill off give one powder every two hours until four or five doses are taken, beginning so the last dose will come about two hours before the chill is due. At other times give a dose every three or four hours.

In robust patients the fever should be controlled with defervescent compound granule,

Great muscular activity in the open air in the country lessens the toxicity of the urine by one-third.—Bouchard.

(aconitine amorphous, gr. 1-134, digitalin Germanic, gr. 1-67, veratrine, gr. 1-134). One granule should be given every thirty to sixty minutes until effect. It should be given in hot water. In asthenic fevers the dosimetric trinity should be used. (Each granule contains aconitine amorph., gr. 1-134; digitalin Germanic, gr. 1-67; strychnine arsenate, gr. 1-134.) This should be used the same as the defervescent compound. In many cases where much stimulation is needed or when the heart is weak the cardiac stimulant granule (cactin, gr. 1-67, quinine arsenate, gr. 1-6; strychnine arsenate, gr. 1-67; capsicum, gr. 1-67) should be used.

In chronic malaria the antiscorbutic (calcidin, gr. 1-3, phytolaccin, gr. 1-3; stillingin, gr. 1-6, arsenic iodide, gr. 1-67; nuclein, four drops) should be used. Dose, one tablet three or four times a day after meals.

JOHN ALBERT BURNETT.
Dean Springs, Ark.

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Dr. Burnett very properly lays a good deal of emphasis upon the necessity of "cleaning out" these malarial patients. This is fundamental—should never be forgotten! By the way, there's one good malarial remedy which he does not mention and which is not used half enough—quinine hydroferrocyanide. Small doses of this drug will "do the work" in many cases better than the mammoth dosage of the sulphate. Quinine arsenate is another favorite of ours and should always be used, "to effect" of course, in cases showing any tendency to linger.—ED.

THIS BROTHER IS READY TO HELP.

I have so often received helps from CLINICAL MEDICINE in the way of practical suggestions that have been of real benefit to me, that I would like to contribute my mite to the general good of my fellow practitioners.

The effect of exercise shows that the toxicity of urine is largely due to imperfect organic oxidation.—Bouchard.

While I was still a student at the Atlanta College of Physicians and Surgeons I had to do a great deal of staining for tubercle bacilli and was always annoyed at the persistency with which carbol-fuchsin would stick to my fingers, coloring them for days like "Joseph's coat." I tried to decolorize them with 25 per cent nitric acid and other media, but found out that the color had to wear off. Since graduating I was appointed one of the assistants to Dr. Harris, secretary of the State Board of Health, and while working in the state laboratory making culture media I found accidentally that a 20 per cent watery solution of sodium sulphite would quickly decolorize any fuchsin stain. I do not know if this fact is known among the brethren who do microscopical work. I certainly never heard of it and since I discovered this fact, I can walk around with presentable hands.

I also want to give the readers of CLINICAL MEDICINE a twin brother to the stethoscope made from a lamp chimney, an account of which some western doctor contributed a year or so ago. In cases of nursing infants who suffer with diarrhea I test the mother's milk for cream. This should be normally seven per cent; an overabundance acts like a dose of castor oil. Holt has a set of instruments for this purpose that sell in New York for \$2.50, I believe. I had occasion to use a set, but did not have the necessary coin and my colored patient had even less, so the instruments staid in New York; but I examined the milk all the same. I took a graduated Purdy test tube, such as are used in centrifuges, price twenty cents, cut a cross in the lid of a pasteboard pill-box and filled it up to 10 ccm. with the milk. Next morning I read the cream off, multiplied by ten and had my percentage of cream. I afterwards used my apparatus to test the different dairymen's milk—I mean

The toxic action of urine is exerted chiefly on nervous tissues since it palsies motion, the heart still beating.—Bouchard.

their cows' milk—and put a feather in my hat with my landlady who thought it a "powerful cute thing."

I also notice some northern doctor is continually asking you about hookworm eggs. Why not show them the real thing? We have the stuff to "burn." Would it not be a feasible thing for the southern doctor to assist his northern brother in this matter, if he is willing to pay "the freight and cartage?"

F. W. SCHNAUSS.

Atlanta, Ga.

—: c: —

A little fertility of brain will put ducats in thy purse, O, Brother. Wasn't that a simple and ingenious idea that Dr. Schnauss worked out? The suggestion concerning the reciprocity in the study of hookworm is a good one. This letter was received from Dr. Schnauss some time ago, but we are sure that the offer will still hold good. If any of our brethren wish to investigate this interesting subject we suggest that they correspond with the doctor. Write him in care of the Georgia State Board of Health.—ED.

AN EXPERIENCE WITH ALKALOIDS.

More than a dozen years ago I began to use the alkaloids. Some years before that I had learned from the eclectics to give tincture of aconite root in small but frequently repeated doses, and when I read of aconitine and the mode of giving it, I quickly ordered a small supply and began its use tentatively. I was pleased. From time to time my alkaloidal stock was added to, until by and by I ventured upon the combinations, dosimetric trinity and defervescent compound. I have since added gelsemamine, agaricin, apocynin, phytolaccin and others too numer-

200 times the normal quantity of urea introduced into the blood of a rabbit did not cause any morbid phenomena.—Bouchard.

ous to mention. I do not use the alkaloids exclusively.

Take an illustration: A young man who had come from Arkansas to this healthy climate to try to recover from an attack of phthisis pulmonalis, his brother having died from the same disease a few years before, sought treatment for night sweats. Following a course of the mild chloride of mercury I prescribed aromatic sulphuric acid and agaricin, the former to be taken three times a day, the latter at bedtime in ascending doses if necessary. It was not required in larger doses than two granules of 1-67 of a grain.

The advantages of active-principle therapy are the purity of the drug, the singleness of its elemental content, the ease with which combinations can be made, and the great variety which can be easily carried into neighborhood practice.

Of course I use calcium iodized, Waugh's anodyne and intestinal antiseptics.

JOHN FREEMAN NEAL.

Lytle, Texas.

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We have learned many good things from the eclectics, and we are always glad to acknowledge the debt. On the other hand a good many eclectics are writing us that they are "picking up" a lot of good things from the pages of CLINICAL MEDICINE. We are doing our best to pay the debt.—ED.

FORCE BEHIND THE ALKALOIDAL GRANULE.

We are cognizant of the fact that many physicians ascribe little potency to the alkaloidal granules as commonly administered, oftentimes speaking disparagingly of their efficacy. This is especially true among the older physicians, those who have never investigated the alkaloids and draw their conclusions from the general outline of the hand-

Potash is 44 times more toxic than soda; causing convulsions and death in doses of 3 and 5 cgrms per kilo weight.—Bouchard.

bag and the size of the granule. Some would class this system of therapeutics along with homeopathy. But recently I was called to see a case of malarial infection, in which the paroxysms were extremely difficult to control, mainly owing to the presence of a cardiac lesion, accompanied by reduplicating, troublesome and an irregular set of heart sounds. Owing to the extreme temperature and the condition of the heart, the physician in charge asked me to see the case. I suggested the use of digitalin granules, 1-67 grain, every three hours, in addition to the course of treatment previously outlined. Several hours later the physician informed me that the condition of the heart had wonderfully improved. Twelve hours later I was called, and found the patient suffering from intense headache, dizziness, dimness of vision, nausea, with a pulse of 40 and complete exhaustion. Alcoholic stimulants were administered, and he gradually revived; however, extreme prostration continued for forty-eight hours longer.

Inquiry developed the fact that the family and physician in charge sized up the physiological effect of the granule on the same par with the homeopathic granule, and these little fellows had been regularly administered every hour for twenty-four hours, and occasionally two or three were given at a dose. In subsequent conference the doctor acknowledged that he did not realize the force behind the little granule.

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We quote the above from an editorial in the Texas *Courier-Record of Medicine*, July issue. The family physician erred in judging of the alkaloidal granules by their "size" instead of by their therapeutic effect. He gave over doses, and failed to realize when he had obtained physiological results. We are glad to get this independent testimony of the "force behind the alkaloidal granule." The doctor should simply remember the rule: "Small doses frequently repeated until we obtain the therapeutic effect, then stop or give just enough to maintain that effect." The granules of the alkaloids and other

Ammonia is less toxic than potash, more than soda; normal urine contains but doubtful quantities of ammonia.—Bouchard.

active principles are reliable and dependable and, if rightly used, they will give the desired effect every time.

DIARRHEAL TROUBLES DISAPPEARING.

Diarrheal troubles are rapidly disappearing, due to two facts: First, that the people are learning to live right, and, second, because the profession is learning to treat them right. The fallacies of the old-fashioned astringent methods are recognized and the doctor is learning to appreciate the importance of intestinal disinfection—to clean out, clean up and keep clean, with the addition of such physiologically adjusted remedies as may be necessary.

Everything else being equal, there is no combination of remedies more generally useful than that devised by Drs. Shaller and Abbott, called the "zinc and codeine comp." formula as follows: No. 1, zinc sulphocarbolate, gr. 1; codeine sulphate, gr. 1-4; hyoscyamine amorphous, gr. 1-250; strychnine sulphate, gr. 1-134; and, No. 2, zinc sulphocarbolate, gr. 1; codeine sulphate, gr. 1-8; hyoscyamine amorphous, gr. 1-500; strychnine sulphate, gr. 1-134.

It will be noted that these formulas vary slightly, the former being the stronger. A few doses of either combination (whichever is physiologically indicated) will check almost any diarrhea and do so promptly, safely and pleasantly. Should there be need for additional astringency, a grain or two of zinc sulphocarbolates should be added.

It is astonishing what prompt results are produced with this combination, especially if the bowel has been cleared, as it first should be, with a saline laxative. From two to four doses one to two hours apart is all that is required.

After the diarrhea is checked, the triple

Seven toxins are present in urine; the least so is urea, which exerts a powerful diuretic influence.
—Bouchard.

arsenates with nuclein will be found a most desirable reconstructive tonic.

THE RATIONALE OF INTESTINAL ANTISEPSIS.*

Those who are inclined to belittle the importance of intestinal antisepsis will, if they consider the subject from a common-sense standpoint for a few minutes, be apt to see the error of their ways. Without even attempting to go into the physiology of the subject let us consider the part the *prima via* take in the life work. In the very first place, we live by and upon that which we absorb; the amount of matter available for supporting vitality depends not so much upon the quantity of material ingested as upon the capability of the body to first transform the crude food into suitable substances and then to assimilate these. A normal digestive system will provide the body with more nutritive material from eight ounces of ingested matter of the proper kind, than diseased *prima via* will secure from eighty ounces. "Absorption begins at the mouth and ends at the rectum" is trite but true. That it should be limited to the upper portion of the tract is sometimes desirable, but the lower bowel absorbs fluids from effete matter just as surely as and sometimes more thoroughly than the proximal portion takes up desired material.

Now, abnormal *prima via* not alone fail to handle foodstuff, but cease to provide the system with the material needed to keep things going. The weakened system is then subjected to the added detrimental effect of toxins taken up from matter which should have passed out of the body and in a different condition. Nature tries to get rid of the offending matter; renal strain ensues, and about the same time hepatic protest makes

*Reprinted from the Medical Summary.

One urine toxin is an unknown narcotic; another causes salivation; an unknown alkaloid causes convulsions.—Bouchard.

it evident that the mischief is general. Each time food is taken the mischief grows; for, improperly treated, it becomes a source of menace instead of repair till it passes from the body. And each day that matters are allowed to go on this way the *prima via* become more vicious, less capable, with the result that finally the body is deranged throughout its entire extent. Deprive the blood and tissues of proper food, and force upon them deleterious matter in place thereof, and soon nerves will jangle and the senses falter.

Now, to the doctor appears the victim of an illy disposed intestinal tract. He has nervous attacks, headache, earache, neuralgia, rheumatism; pains here, pains there, and every sort of disability, save that of describing his symptoms. That he can do fluently. If the doctor treats that man (as many a doctor has, does and will do) for the group of "miseries" detailed, he will do either one of two things: benumb the nerves so that they fail to carry their protest at the condition of things in the laboratory to headquarters, or set up some counter-irritation which will, for the time being, draw attention from the original troubles. If he is a very scientific doctor and drugs diligently enough, he will probably set up some organic disturbance which will last as long as the patient. Opiates, quinine, etc., given at such a time spell *disaster*. If the physician is puzzled and gives a placebo, and orders a low diet for a day or two, the patient may get better; but that isn't modern practice. We are teaching every day the necessity for treating symptoms. Imagine treating the "symptom" caused by thoroughly disorganized and toxic *prima via* in any but one way. And imagine the results—if your brain is active enough.

Now, do you see the absolute necessity for intestinal antisepsis? Do you realize

One urinary toxin causes contraction of the pupil, probably a coloring matter rather than an alkaloid.—Bouchard.

that the body cannot be "well" unless the *prima via* are in a normal condition, that to make a sick person well without placing the very source of well-being in proper working order is an utter impossibility? Why, even the medicine you give cannot be effective if the mucosa of the *prima via* is inactive, and for every atom of remedial material you provide, the foul intestine opposes a flood of toxins. In every disease, it matters not whether it be "thrush," measles or pneumonia, the first thought should be to empty the digestive tract; to render it as nearly clean and normal as possible, and then to keep it that way, and prevent the turning of what should be food-stuff into toxic matter, by exhibiting proper antiseptics. Unless you use the hypodermic needle, you have only one method of gaining access to the system you desire to influence with drugs—through the absorbent portion of the *prima via*. If you trust that a diseased and disordered mucosa will act in one way for your remedies and another for food, you are mistaken. And let us remark here, it is just as desirable that food should be properly taken care of, as it is that drugs should be assimilated, more so, in fact, for no one ever yet lived upon drugs; they have managed to exist upon food. It is quite apparent, therefore, that if you would have your patient derive benefit from your medicines you must make assimilation possible, and, take care that there is nothing left to be assimilated except acceptable material.

The reader will grasp the fact that a good rule is: Take out before you put in; which being transcribed means,—empty your patient and get rid of every deleterious substance in the digestive tract, and then begin to give nutriment and medicine. In urgent cases the rule may be relaxed to the extent that remedies may be exhibited hypodermatically (or even absorbed from the buccal

One urinary principle reduces heat by lessening its production; possibly a coloring matter, insoluble in alcohol.—Bouchard.

mucosa), and nutrient given by the same methods or even in the ordinary manner if in fluid and highly concentrated form. But even then the main thing will be to establish as rapidly as possible a normal condition in the *prime viae*, for that accomplished we can practically regulate the rest of the body to suit ourselves. Let us be sure that no toxic matter is flooding the system, and that we have an absorptive and an assimilating digestive tract; and we cannot alone support our patient while remedying or repairing more remote damage, but we can feel sure that each day the blood stream becomes a more effective ally, and know also that each dose of medicine we give to meet a given symptom enters the system and does what it was given to do. Attend to the *prime viae* first, that is the first way (and the best) to defeat disease.

G. H. CANDLER.

Chicago, Ill.

ARE YOU A QUARTER OF A CENTURY BEHIND ?

I have been practising active-principle therapy since '96 and my contention is that the physician who does *not* practise it is twenty-five years behind the times.

S.

—, Massachusetts.

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You are right, a physician who does not practise active-principle therapy is at least "twenty-five years behind the times" but some men seem to think it necessary to trail along at the end of the medical profession even while they use electric lights in their houses and supply their children with Waterbury watches at a dollar a watch! Candles and the town clock are laughably "old-fashioned," but the beastly "black draught" and the grue-

Uries contain antidotes to their own poisons; potash salts are neutralized by the narcotic principle.—Bouchard.

some galenical drench of the grand-dads is good enough for the sick. And it is laborious to think when you can be accepted as a wise man without using up the cerebral cells.

"However and notwithstanding" the number of men who have begun to think, augurs well for the near future. Fifty thousand odd have "*done their thinkin'*" and use positive therapeutic agents every day. And "*they're doing the work*," brother!—ED.

NORTHERN WISCONSIN AS A CURE FOR CONSUMPTIVES.

I have just returned from a eight months' sojourn in the woods of northern Wisconsin and am greatly tempted to say a word through the columns of CLINICAL MEDICINE, and through the many physicians who read its pages, to the consumptives of the United States.

I have verified some of the statements made in my article in the JOURNAL on the outdoor treatment of consumption, and again reiterate the statement that it is the most rational up-to-date treatment.

Northern Wisconsin is a region of great magnitude where there are wide stretches of wild land, covered with pine, cedar, tamarack, spruce, and other species of evergreen trees. These load the atmosphere with their healthful, life-giving aroma, and furnish the ideal air for the consumptive's lungs. It is a region of lakes and swift running streams of water, clear as crystal, sweet and pure everywhere for drinking purposes. Wisconsin can furnish more good water than any state in the union. Its climate is healthful in all respects. There is absolutely no malaria. Chills and fever unknown. Hay fever, also, totally absent. This is attributed by the local physicians to the fact that the goldenrod is never found here.

Myosis is constantly present in uremia; all sufferers from choleraic anuria have the pupil contracted.—Bouchard.

Besides these advantages there are many others, especially fitting to the consumptive case. So I unhesitatingly say to such, take a tent, cot and a few cooking utensils and hie yourselves away to this favored spot. Tens of thousands of acres of wild woodlands on the banks of the lakes or among streams, offer you camping ground free of rent, and the millions of cords of fallen timber furnish you all the fuel you can consume, also free, while the waters are swarming with the finest kinds of fish, waiting to be caught to furnish your tables with this choice edible, and if you like berries, wild strawberries are found in abundance and there is no limit to wild blackberries, raspberries, dewberries and blueberries in their season, all these free for the picking.

The question of cost need not deter anyone for it is nominal. No one need expect to find a Paradise, at least not the consumptive, and this is not written for any who do, but for the benefit of those who are suffering and wish to alleviate their condition, which they can do usually by roughing it, and many do in the woods of Northern Wisconsin. In the hope that this may be of service to some of these suffering mortals, the advice is offered, and I trust it may bring forth results.

W. H. H. BARKER.

Chicago, Ill.

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Dr. Barker's suggestion is an excellent one, and we are glad to add a supplementary Amen! When the case is not a far advanced one the advantages of this vast region in Northern Wisconsin are apparent. But it certainly would be inadvisable for far advanced cases to go up into unsettled portions of this country alone, and in any case the patient should select a location where the services of a skilled physician are to be had. By the way, why do not some of our Wisconsin brethren of the "family" make a special

Urea, long the scarecrow of physicians, is especially injurious when it is not present in sufficient quantity.—Bouchard.

effort to take care of these cases and fit themselves for the work.—ED.

SOME USEFUL RULES FOR PREVENTING TUBERCULOSIS.

To describe the various sources of infection during school life I believe I can not do better than to repeat here the little list of rules which I like to see school teachers give to their pupils, and which might serve as an alphabet in the prevention of tuberculosis.

1. Every child and adult can be helpful in fighting consumption. School children can help by complying with the following rules:
2. Do not spit except in a spittoon or a piece of cloth or a handkerchief used for that purpose alone. On your return home have the cloth burned by your mother or the handkerchief put in water until ready for the wash.
3. Never spit on a slate, floor, sidewalk or playground.
4. Do not put your fingers in your mouth.
5. Do not pick your nose or wipe it on your hand or sleeve.
6. Do not wet your finger in your mouth when turning the leaves of books.
7. Do not put pencils in your mouth or wet them with your lips.
8. Do not hold money in your mouth.
9. Do not put pins in your mouth.
10. Do not put anything in your mouth except food and drink.
11. Do not swap apple-cores, candy, chewing gum, half-eaten food, whistles, bean blowers or anything that is put in the mouth.
12. Peel or wash your fruit before eating it.
13. Never cough or sneeze in a person's face. Turn your face to one side or hold a handkerchief before your mouth.
14. Keep your face and hands and fingernails clean; wash your hands with soap and water before each meal.

If blood itself is not toxic, it is because normal urine is, and is incessantly removing toxicity from blood.—Bouchard.

15. Do not kiss any one on the mouth or allow anybody to do so to you.
16. When you don't feel well, have cut yourself or have been hurt by others, do not be afraid to report to the teacher.
17. Be just as careful and cleanly about your person at home as in school.
18. Clean your teeth with toothbrush and water, if possible, after each meal, but at least on getting up in the morning and on going to bed at night.
19. Learn to love fresh air and learn to breathe deeply and do it often.—Knopf, *J. A. M. A.*

HOW TO DISARTICULATE A SKULL.

Having recently noted in a medical contemporary, perhaps the *Brief*, an inquiry as to how to disarticulate the bones of the human skull for the purpose of the better studying their anatomical arrangement, the following method is given:

Through the large foramen at the base of the skull fill it with white beans. Those known as navy beans and used for cooking purposes are the best. Then pour in tepid or hot water until the skull will hold no more. Base upward, set the same aside, and as the water is absorbed by the beans, add more. Keep this up and at the end of forty-eight to sixty hours, the work is done, and the bones sent asunder, not broken however or pressed out of shape, but simply separated. Even the sphenoid and other internal bones will readily separate as well. The writer has proved the worth of this procedure, by having used it himself, and can truthfully say, that it proved entirely satisfactory.

W. H. H. BARKER.

Chicago, Ill.

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This method of disarticulating a skull is an old one, but good. Our colleague, Dr.

By the kidneys blood-poisons should be eliminated twice more quickly than water, 26 times slower than urea.—Bouchard.

Epstein, makes the following additional suggestions from his own experience: First, take peas instead of beans, and select those which are very dry, and slightly corrugated on their surfaces. The peas being more nearly round than the beans, when they swell exert their pressure more nearly in every direction. Second, be careful not to lose the small bones; place the skull in a proper receptacle during the process of disarticulation. Third, select the skull of a young subject and preferably that of a female. In old subjects the sutures are often very firmly closed, and may be ankylosed; no use trying to disarticulate such a skull. Steer clear of a negro's skull!—ED.

HAS HYDRASTIS CUMULATIVE EFFECT? A THRILLING SEQUEL TO DROPSY OF THE GREAT OMENTUM.

Alas and alack! The inevitable has happened. My lady, tired of such plain everyday medicaments as apocynum, elaterium, calomel and podophyllin, and lured by the siren song of the fair testimonial maid, turning a too-willing ear to the low-voiced dulcet strains of the traveling medical gentleman in the patent leather shoes who represents the only, onliest sure cure for all the diseases the daughters of Eve ever did have or ever will have. He freely confesses he don't know what it is made of, but vaguely intimates that it is distilled from flowers and fruits.

Well, I am a notch ahead of him there, I do know what it is made of and what's more I am going to tell. I'm not only going to give the formula, I'm going to tell how to use it. My stern desire to be strictly ethical drives me to it.

You will, of course, perceive what scattering this knowledge broadcast will do. The homes for indigent doctors, will be filled

The kidney may expel toxins if not urea, so that serum-excretion in auto intoxication may still be useful.—Bouchard.

with weeping gynecologists. As a clincher concerning the importance of the knowledge I am about to impart, let me quote you a statement, a mere incident, out of their book—for, of course, they have a book, 350 pages, beautifully bound, beveled edges and with the pictures of the two founders of the treatment, pretty men both of them.

A lady afflicted with an external uterine fibroid as big as a cocoanut (the remedy will work equally as well on gentlemen who are similarly afflicted) used the treatment nine months with the following annoying result: That fibroid migrated to the interior, grew a pedicle, was extruded per vaginam and was snipped off with a pair of scissors by the patient herself. What a boon this remedy will be in *verruca senilis*,—simply keep the wart moving around so fast it won't have time to become carcinomatous.

Now to get down to business. We list about six preparations, but owing to our peculiar and secret method of preparation (discovered of course at vast expense) we get the active principle of all of them out of the same bottle. Lets just table them.

Cerate; blood, skin and nerve food. Base coca butter. What gets action? Glyceritum hydrastium. Sig.: Bathe spine in solution of water and vinegar one-half each. Dry carefully. Now with the palm of the hand rub carefully into the spinal column from the atlas to the coxa, a lump of cerate about as big as a hickory nut keeping up the friction about fifteen minutes. This once daily at bedtime. Vaginal suppository: A number four gelatin capsule filled with cerate. Sig.: insert one at bedtime. Anal suppository, filled ditto, also ditto sig. Drops: Fluid extract hydrastis. Sig. Ten drops three times daily in a tablespoonful of water. Laxative tablets: Podophyllin, 1-4 grain taken to effect.

To cause death by autointoxication the toxins in the blood should be 2 1-2 times above the normal quantity.—Bouchard.

Now because I have put you next, don't go cutting the tariff; a four ounce vial of fluid extract hydrastis will cost you a dollar any old place and one must have some profit. We get \$32.00 a month (fact) for this treatment and even then owing to the enormous expense of upholstering our traveling doctors, we sometimes find it hard to make both ends meet.

After I'd Sherlock Holmesed these peoples' formula, I became intensely interested in my one-time case. For why? Because I am moderately well posted on hydrastis, and here it was being slammed into the system by every possible inlet, for of course everybody takes a full treatment. What's the use of paying \$32.00 for half a treatment, when you can get the whole push for the same money. I could see that they were blame likely to do some good and make a pleasant impression with the drops and the suppositories; but the use of hydrastis in that "Balm of Gilead" cerate was a new one on me. Therefore I bottled down my wrath and humbly begged my lady for a few crumbs of second-hand information imparted to her monthly by him of the gorgeous raiment. I'll bet the price of his pajamas would keep me in hand-me-downs two years. I can't for the life of me keep my wits from wandering away now and then to this gentleman; he gets as much in my way as King Charles' head did in Mr. Dicks. Now we'll try and let the golden seal have another little inning.

I'm commenting on an elegant little paper on Hydrastis by W. Blair Stewart.

Dr. Heinrich Stern gives the symptoms of hydrastis accumulation as follows: Headache, vertigo, blurred vision, nausea, constipation, *insensibility of terminal nerve filaments* (italics mine) and convulsive disorders. That italicised symptom showed up pretty pronounced after about seventy

Sudden destruction of blood cells causes debility, salivation, convulsions or death, but never narcosis except in uremia.—Bouchard.

days' treatment, but what interested me most was a peculiar indescribable fault, a year's ageing as it were in sixty days; the corners of the mouth drooped, the wrinkles at the external canthus became accentuated and had that drawn look, so common in the appearance of the prematurely aged alcoholic. Of course she was somewhat icteroid to start with, with her hepatic trouble. That was to be expected, but I can't divest my mind of a rather far-fetched notion that that yellow stuff was by some hocus-pocus absolutely staining her. Her color got lighter but it also got brighter, if one might coin a term, a sort of pallid lemon hue, and another queer thing—you couldn't have locked her tighter with gum opium. Now, here's a nickel's worth of deductions (stamps taken). (1) Is it cumulative? It are. (2) What's its worst cumulation? Its slow but powerful and steady astringent action whereby we get deficient peristalsis, closure of arterioles with consequent starvation of nerve terminals. Might call it "golden seal syringomyelia."

L. THOMPSON CLASON.

Urbana, O. (R. F. D.)

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This continued story of the "Great Omentum" grows in interest as it advances! In this installment Dr. Clason's fine piece of detective work, a la Sherlock Holmes, wins our admiration. His study of the action of this widely heralded nostrum and the demonstration of its apparent identity with hydrastis will throw some light, we believe, on other people's experiences with this remarkable (!) remedy—for as probably some of our subscribers have guessed, the "patent" under discussion is—"viavi." Now what do you think of it? Is Dr. Clason right in his deductions? Some interesting questions here in ethics, pharmacology, and a variety of other things.

Extract of meat may be of some utility from an alimentary point of view; to a certainty it is toxic.—Bouchard.

By the way, some of our subscribers are a little doubtful about the correctness of Dr. Clason's diagnosis of this case. Read what Dr. Fletcher says in the next article.—ED.

"DROPSY OF THE GREAT OMENTUM," AN ANSWER.

In the August number of CLINICAL MEDICINE, Dr. L. Thompson Clason reports (page 1104) a case of "Dropsy of the Great Omentum," and asks for comments.

In the contribution of the following comments, I wish most of all to emphasize the futility of requesting "comments," or expecting an intelligent discussion of an obscure case in the absence of a detailed case history. The history of the case reported is incomplete, and lends no real information concerning the many things that would be up for consideration in the making of an exact diagnosis.

How about the family history? Is there anything in the personal history suggestive of syphilis, malignancy, visceral or peritoneal tuberculosis? Does the patient carry a temperature? Is she emaciated; does she present the ovarian facies? Has she the coated tongue, fetid breath, anorexia, pain in the epigastric and hypochondriac regions; nausea, vomiting, sick headache, and sometimes slight jaundice, common to cases of chronic passive hepatic hyperemia (hepatic insufficiency)? Is the liver enlarged; is there a palpable mass in the belly, or any evidence of trouble in the upper or lower right quadrants of the abdomen? Has the patient been tapped? Has the urine been examined microscopically?—These and many other questions are concerned in the making of a correct diagnosis, and are as indispensable as the physical examination of the patient.

Every aliment would become a poison if renal elimination was not the safeguard of the body.—Bouchard.

The physician should, if he is painstaking, have but little trouble in differentiating between an ovarian cyst and ascites. The diagnosis of "Dropsy of the great omentum, due to hepatic insufficiency," is entirely too ambiguous. The case merits a diagnosis that will account for the primary pathology of the malady. The ascites—fluid in the belly cavity—is symptomatic of some intra-abdominal, thoracic, or pelvic pathology.

Edema of the omentum is usually manifest in the resulting ascites; the dropsy being caused by a pouring out of fluid from the omental vessels. All conditions favoring an increased formation of lymph, as well as those preventing the absorption of peritoneal fluid, lead directly to ascites. Tumors which cause pressure may impede the circulation and make the omentum a direct factor in the production of dropsy. Omental dropsy occurs secondary to the visceral affections which cause venous stasis.

The case might be an ovarian cyst complicated by ascites, hydrops omenti, or an accumulation of fluid (tubercular) in the lesser peritoneal cavity. Ascites as a complication of ovarian cyst is suggestive of malignancy. It can, however, follow torsion of the pedicle or necrosis of the cyst wall. In hepatic dropsy, tubercular peritonitis with effusion, or an ovarian cyst complicated with ascites, the omentum undergoes contraction and the peritoneum so thickens that a diagnosis is impossible without an exploratory incision.

The abdominal contour, percussion resonance, posture of patient with a resulting change in the line of flatness; vaginal examination, the edema, and other points mentioned by Dr. Clason, are well considered. The Doctor must, however, be put right with regard to one statement upon which he lays stress, namely, that the patient's menstrual periods were "abnormally" regu-

Aqueous extract of muscle causes neither salivation nor narcosis, but convulsions, exceptionally contracting the pupil.—Bouchard.

lar. In reading the case report I interpreted that he thought this one thing alone sufficed to exclude "ovarian" trouble. Regular menstruation does not signify that one or both ovaries are not diseased. It is a curious fact that, in the presence of a cystic degeneration of one or both ovaries, menstruation usually continues regular. The ovaries functionate even when a microscopical investigation fails to demonstrate any functional structure of the glands.

If I knew more concerning the history and temperature curve of Dr. Clason's case, I would, more than likely, make a diagnosis of peritoneal tuberculosis—with effusion. I cannot make myself believe that Providence did either a "beautiful or fitting thing" on the (fatal) "All Fool's Day" of which Dr. Clason spoke. If the case has neither renal, hepatic or cardiac complications, the ascites should be treated surgically. One year of medicinal treatment (with alteratives and purgatives) without tapping, in the absence of a permanent improvement in the "ups and downs" of the patient's physical status, makes it obvious that the case should be subjected to an exploratory laparotomy. Drainage will cure the tubercular peritonitis; the Thalma-Morrison operation might improve the dropsy if it results from cirrhosis of the liver, and in the presence of an ovarian cyst its extirpation should be followed by recovery.

FRED FLETCHER.

Columbus, O.

PUERPERAL AUTOTOXEMIA.

If I recall properly, Dr. Waugh told us a few months ago why we should expect to find many cases of puerperal autotoxemias. I believe it is a fact that we who are in general practice, do find many cases of that condition. I believe that many cases of sup-

Biliary salts break up blood cells and other cells, striated muscular fibers and liver cells, setting toxins free.—Bouchard.

posed septic trouble are nothing more nor less than autotoxemia. I had learned years ago that it was a good thing to give intestinal antiseptics in cases that we supposed were septic cases, and treated as such, but had not fully grasped the idea of why until the following case fully demonstrated the trouble and its cause.

Mrs. B. was confined in usual way—nothing abnormal in the labor. She, however, was very nervous, could not lie still on the bed, and talked incessantly, we thought from joy and natural excitement due to the advent of her little girl. Bowels moved freely without laxatives, according to her nurse, hence no laxative was ordered. On the third or fourth day there developed a little fever, supposedly from flow of milk; next day found a slight increase in fever, but could not find a cause for it. Next morning found fever 103° F. and became alarmed. Lochia seemed perfectly normal without undue odor, but I gave a hot intrauterine douche. I called in a couple of hours and found temperature 104° F.

I ordered saline laxative every two hours until the bowels flooded with watery stools. I also alternated the saline with an intestinal antiseptic every two hours. Next morning I found temperature normal—nervousness all gone, and a picture of perfect peace and contentment. The transformation in that sick-room bordered on the miraculous. Gentlemen, my eyes opened wide to the following facts which I have since fully demonstrated as true:

1. That much nervousness and insomnia are due to autotoxemia.
2. That in every case of apparent septic fever elimination with salines, together with intestinal antiseptics should receive paramount consideration.

The above facts were further confirmed in two other almost similar cases occurring

during the same year. If my readers had seen these three cases, or any one of them, they would never doubt the soundness of the "W-A" doctrine of "cleaning out and keeping clean."

J. H. FRETZ.

Lambertville, N. J.

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This "doctrine" can not be preached too much. It's fundamental. Often, very often the doctor's success or failure depends upon his grasp upon it. "Clean out, clean up and keep clean!"—ED.

ATROPINE AS A HEMOSTATIC.

1. I use it always after confinement where bleeding seems profuse. It is handier, safer and more certain in action than ergot, or any other hemostatic. In the case of Mrs. W., age 32, with twins, I arrived as the last child presented. There was post-partum hemorrhage. I gave two granules of atropine and one of glonoin (the little shock wonder); repeated the dose hypodermatically in fifteen minutes, and again in fifteen minutes. Oh my! the change! Patient was breathing short and stertorous—the kind that heard once is never forgotten; was pale and pulseless; but now breathing became less hurried and color returned. Another life saved, thanks to the "sure shot" alkaloidal treatment.

2. A sure remedy in hemorrhage from the lungs due to tuberculosis. A granule every fifteen minutes will do the trick.

3. Epistaxis. Willie J., age five years, the case of a brother practician. He had plugged the nose and used tannic acid and adrenalin. The child was pale and pulseless. I advised atropine and gave the same, two granules every fifteen minutes. The bleeding was controlled after the second dose. The trouble has been we don't give

Jaundiced urine is not narcotic but convulsive, which it owes to the potash from cellular disintegration.—Bouchard.

Bile is 5 to 10 times more toxic than urine; a man produces a kilogram of bile every 24 hours, or 14 grams per kilo body weight.—Bouchard.

enough of the indicated alkaloid, but "sufficient dosage" does the work. Long live the alkaloids. My first offense, editor, but couldn't help it.

HARRY W. SIGWORTH.

Anamosa, Ia.

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Thank you for this contribution, which we assure you is appreciated. If this is really your first offense we trust that you may become a confirmed criminal. Just such short, helpful contributions, are what we are looking for and very rarely receive!—
ED.

CONVINCED BY PROOF OF CHOLELITHIASIS.

I write you a few lines in explanation of why I have decided to exclusively employ the alkaloids in my practice. Briefly, I made an impartial trial of a few vials sent me (and I will frankly state in a case of bronchopneumonia—child, four years old—the first dose of aconitine I administered in solution was not without misgivings on my part). The subsequent improvement in this particular instance under alkaloidal treatment, together with the rapid convalescence of the little patient led me to exhibit the alkaloids in several other affections in different patients, all with uniformly good results.

I have been cautious with the remedies I am acquainted with and excluded those unfamiliar to me, but intend to broaden and expand my knowledge of the entire subject of active-principle medication, as it appears to me to be the most logical therapeutics, so far as definite results are concerned.

I dispensed a few of bilein tablets (together with the "intestinal antiseptics") a few days ago for the relief of the distressing symptoms following the paroxysm of acute cholelithiasis.

If the kidneys eliminate each 26 hours half the fatal dose of toxins the liver in that time eliminates 6 times more.—Bouchard.

asis and with the view of exerting a specific effect in preventing further disturbances. I don't know why I did so; but at any rate the results were not exactly as brilliant as I had hoped for and I have induced the lady to permit me to operate on her on Tuesday next, as she has sort of "lost hope" in internal medication. The bilein was not to blame, but I reckon perhaps I was expecting too much of it. Was I?

T. C.

—, Michigan.

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Just as Hall was converted (by a display of power and against his will), so evidently the granules by their effectiveness served to bring you into the fold. Allow us to extend to you a hearty welcome and express the hope that you may be uniformly successful. If you will diagnose carefully, Doctor, and exhibit the right remedy for the conditions present in small, oft-repeated doses you must get results. After you have become thoroughly familiar with the alkaloids by continually increasing your acquaintance with them you will see that many drugs having an action somewhat similar are really markedly different. As an instance. In hyperpyrexia we could give gelseminine, aconitine or veratrine, but the man familiar with the action of each drug knows that there is a certain class of high temperature cases which will call specially for gelseminine, another in which veratrine is distinctly indicated and still a third where aconitine will give the best results. It is just this "niceness" in therapeutics which counts, and therefore the man who says, "I can practise with twelve remedies," is in error and can never get the perfect results obtained by the physician who is familiar with the whole *materia medica*.

Bilein could hardly serve you in the case described. Sodium succinate with boldine

Bile being toxic directly and indirectly, the intestine is already a source of intoxication, feebly but really.—Bouchard.

and bilein would probably do the work and save the knife. But don't expect a cure in a "few days." In a case of this kind the indicated remedies must be given for weeks and months. Try next time.—ED.

REPORT ON SPARTEINE IN LARGE DOSES.

When Dr. George E. Pettey called attention to sparteine sulph. (gr. 2 at a dose) I had a gentleman, aged sixty, never sick before and well preserved, who had an enlarged heart with mitral valve insufficiency. Could not sleep owing to suffocation and pain in chest nor walk any distance, as his breathing apparatus would give out. Had him on various heart remedies with little improvement. But sparteine in two-grain doses every three hours soon brought relief and in two weeks from first taking the remedy he went to work, his occupation being a grocery clerk. He still takes the remedy twice daily and feels no more of those suffocating sensations.

A. S. FULCHER.

San Francisco, California.

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Accept thanks for your report as to the use of sparteine. We wish that all the members of the "family" who tested the treatment recommended in the JOURNAL would report in this way. Then we should be able to form a definite idea as to the value of same.—ED.

THE COMPARATIVE THERAPEUTIC ACTION OF CARDIAC DRUGS.

The therapeutic actions of digitalis, cactus grandiflorus, gelsemium, strophanthus, crataegus, convallaria, apocynum cannabinum, and sparteine have been compared in a recent number of *Les Nouveaux Remedes*. It is

A third source of blood toxin is putrefaction; from imperfect digestion and the action of intestinal microbes.—Bouchard.

pointed out that the use of digitalis should be restricted to cases of a weak, rapid, easily compressible pulse, accompanied by cyanosis, dyspnea, or edema and insufficiency of the aortic or mitral valve. But it should not be given when the pulse is full, firm and slow, or when there is stenosis of the aortic and mitral valves, with fatty degeneration, or in cases of marked arterial sclerosis. In cases of sudden failure of the heart, digitalis may be administered either alone or in conjunction with strychnine or nitroglycerin.

Cactus admits of more general application than digitalis. It is especially useful in cases of cardiac weakness associated with defective nutrition and consequent extreme irregularity or aggravation of the action of the heart, but it should be avoided if such action is due to temporary nervous excitement; in such cases gelsemium soothes the excitement and allows the heart to regain its normal condition. Cactus acts as a cardiac sedative and lowers the temperature in fever associated with cardiac depression or when collapse is threatened. When, however, the temperature is subnormal cactus restores it more rapidly than strychnine.

Strophanthus is useful in cardiac dilation and sometimes in valvular insufficiency; it is given together with cactus, avena sativa, and crataegus when the dilation is associated with atheroma. Crataegus should be administered in chronic cases with valvular insufficiency and a tendency to atheroma, in sudden cardiac attacks in young, nervous, excitable patients, and in cases of exhaustion with persistent palpitation, dyspnea, and weakness. Convallaria controls the action of the heart when the derangements are caused by reflex action; it diminishes the number of beats, relieves the pressure, and renders respiration easy and regular. Apocynum is indicated when the feeble action of the heart is accompanied by dropsy and the

In the digestive canal the conditions most favorable for the elaboration of poisons are realized, peptones, etc.—Bouchard.

pulse is either slow or rapid. Sparteine is a general cardiac tonic and is of value when the beats are unequal in strength and the rhythm disturbed, whatever may be the valvular lesion.—*The Lancet*, Aug. 4, 1906.

ATROPINE; ECHINACEA. AN IDIOSYNCRASY.

I have a few things to report just to aid the clinical investigation of drugs and alkaloids:

Atropine I have used in the night sweats of phthisis and found that in no case or instance did it fail to stop the sweating. I have used it for vomiting combined with other remedies recently, in a case of sick headache, and think it was of material help, as the patient was relieved at once.

Magnesium sulphate cannot be given to every patient, I have found in my own practice at least. I used effervescent saline laxative with the direction to take a tea-spoonful before breakfast in one-half glass of water. The patient took the first dose, which produced nausea and vomiting so that she missed two meals that day. She tried the remedy in reduced dosage on two different occasions with the same result. Upon inquiry I found that magnesium sulphate always produced the same result with her mother, and all of her mother's family, or nearly all, were affected the same way. It seems a case of hereditary idiosyncrasy for magnesium sulphate, something I had not met in my reading or experience before.

Calcium iodized I have found to irritate the stomach in two cases I have had. Both of these had naturally irritable stomachs and have been treated at times for that defect. What is the cause of this irritant action and the remedy?

I have used echinacea in typhoid combined with the regular treatment, but could

Conditions favorable for putrefaction are so numerous that we ask if digestion can ever go on normally.—Bouchard.

not tell of any distinct result from it. I succeeded in aborting one stye that was developing after one had preceded it and was opened. In cases where I have used it combined with calcium sulphide for boils I have found them less painful and the usual necrotic area absent when opened.

In closing I wish to say that I have found the methods of treatment advocated by the JOURNAL the most successful and always of benefit.

R. A. BLACK.

Burnham, Me.

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The idiosyncrasy for magnesium sulphate is a rare one. We cannot now recollect another case in which this saline laxative has produced such results. But, as you know, Doctor, there is not a drug in the *materia medica* which has not caused distress to some person. And yet it is strange that magnesium sulphate does not more frequently produce toxic symptoms, for when thrown directly into the blood current it undoubtedly acts as a poison; while in the intestinal canal it is an almost ideal laxative. These idiosyncrasies are rare and unexplainable, but they do exist once in a while. The fact that it was hereditary in this patient's case makes it more interesting.

Calx iodata occasionally disagrees with the stomach, as do all other iodine preparations, but we have found it far less liable to produce trouble than any other combination of iodine with which we have had to deal. In such cases it is advisable to give it in hot water, largely diluted.

Echinacea is a valuable remedy, but we do not consider it peculiarly indicated in cases of typhoid. This disease calls primarily for the "cleaning out" process and the use of the sulphocarbonates to "sweeten things up." On the other hand it is a useful remedy in all cases of systemic poison-

1.1 grams HCl per liter prevents all fermentation; but the gastric juice contains up to 3.3 or 5 grams.—Bouchard.

ing and in combination with calcium sulphide, in boils and carbuncles, makes an ideal method of treatment, as you yourself have already discovered.—ED.

CALCIUM SULPHIDE IN Puerperal SEPSIS.

I will relate my little experience with calcium sulphide. One year ago the 29th of last May, my wife was confined and a nine-pound girl was presented us.

I had taken all due precaution with my wife and myself; with soap and brush I cleansed my hands thoroughly, following with bichloride solution. Wife made it through as easy as she had twice before. Placenta came away all right, but some five or six days after she complained of headache and so on, common in septic states. I gave her a little calomel followed by magnesium sulphate; and began calcium sulphide, one grain every three or four hours, also every six hours bichloride douches, 1 to 2,000 or 3,000.

On the tenth day she was able to sit up a little, but gradually kept feeling worse until on the fourteenth day the storm came at about six o'clock in the evening. I called in another doctor. She had a violent chill, fever 104° F., little tympanites, etc. We changed the bichloride for carbolic acid, more calomel. Calcium sulphide, one grain every hour. Next day fever went off, bowels acted well and the patient made a quick recovery and has been in very good health ever since.

F. S. BOBBITT.

Bronson, Tex.

THE CRITIC CRITICIZED.

Please allow me to criticise a few things in July CLINICAL MEDICINE, not necessarily

Infectious agents are not destroyed but neutralized by the gastric juice; passing into latent vitality.—Bouchard.

for publication, but for righteousness sake. On page 857 the "howling socialist" fills the air with lies ("misleading and mendacious") about capitalism. When? Where? Name them! But if so, do not other partisans lie? Roosevelt says some republicans lie. What has that got to do with it? You admit the existence of "muck," but you are fighting those who are trying to get rid of it, and defending those who are piling up more "muck." Suppose the president was right about muck-raking? Didn't he send men to the muck pile who corroborated every single substantial charge in the "Jungle." If so, for God's sake why do you and others say "hush," "peace," "when there is no peace?" "Get rid of the grouch," eh? Then if no one complains of wrong, how long before we will be "bound hand and foot?"

On page 862 you are suspicious, not of the packers, but of Sinclair, Roosevelt, and those who are trying to protect the public against impure food.

On that question I am sure you know that food is adulterated and doctored in almost every line. In the report of the *Louisiana State Chemist*, not an item scarcely found which was free of harmful drugs. You don't see why people "should destroy the credit of their own products by selling diseased foods." I do! Profits! profits! God-forbidden profits. Besides they don't think they are destroying their credit, for they count on not being found out.

On page 969 you say the physician is not sharing as he should in the prosperity. Who is? See the last report of the United States Labor Commissioner, on poverty in the city of Washington. If you have a heart of flesh that report will open your eyes, for I know you have brains.

Has a little success so blinded you that you can't see that not more than one in a

Intestinal contents if not alkaline or neutral are feebly acid, by commencing acetic fermentation.—Bouchard.

hundred is allowed a share in the so-called general prosperity? Suppose ten in the hundred were sharing? Are you satisfied to leave the ninety thus disinherited because you are one of the ten? Forbid it Heaven! For my part, I am giving "my fame, my fortune and my life" to free mankind from their industrial shackles and I cannot quietly see my good journal throw obloquy on the good cause without an attempt to show its inconsistencies.

T. L. MYERS.

Meridian, Miss.

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From a later letter from Dr. Myers we conclude that our main offense consists in the use of the words "mendacious," "diatribe," etc. We rise to explain—as gracefully as possible. We did not intend to apply these terms to all or even many socialists. Far from it—there was a time when socialism appealed to us, and we have many warm friends who are socialists; we know of few more earnest and optimistic men than many of these. But there is a socialism of a different kind—represented by the yellow journal, which aims to make political capital out of everything, which destroys men's reputations recklessly, cruelly, and with little or no attention to truth and justice. Socialism has been unfortunate in having as advocates, directly or indirectly, men and mediums of such a kind,—and this is the kind which is making the most noise, which *does* lie and misrepresent.

We assume from Dr. Myers' letter that he is a socialist and we gladly admit his right to think, teach, and work along these lines, whose intent is the betterment of our kind. At the same time we claim the right to disagree with him, while insisting that our motives are as high and our determination to help mankind just as strong as his can possibly be. We have not time, nor space in CLINICAL MEDICINE, to go into these socio-

Bile may ferment or putrefy; it can therefore but feebly oppose fermentation in the small intestine.—Bouchard.

logic problems as we would like to do.

In the articles to which Dr. Myers takes exception, our desire is not, as he must see if he reads them carefully, to defend wrong or cover up vice and injustice in any form; it is exactly the opposite, to insist that justice should be done *every* man, that every question shall be discussed in a spirit of real righteousness, real common sense, and that we shall not be carried off our feet by the spirit of the mob. It is the tendency of human kind to "follow the leader," and when any man is attacked to pounce upon him like a horde of wolves without taking time or using the discrimination necessary to determine the extent of his sins, or, if he is guilty of any sins at all. All we appeal for is fair play—fair play for every man, absolute fair play, no hasty condemnation upon mere newspaper evidence. Let us have no compromise with evil, let us fight it, but first of all let us know that what we are attacking *is* evil. This is the intent of the editorials to which the Doctor objects, and which were addressed principally to "muckraking" in medicine. Those who read this journal from month to month *know* how we stand on the questions of pure food and pure medicine. There has never been any equivocation or turning aside from the main issue on these points. And on these and all other questions we stand first of all for what in our opinion is *right*—no more, no less.—ED.

ANTITOXIN IN DIPHTHERIA.

I wish to state that several letters have been received criticizing the writer's position on the use of antitoxin in diphtheria. The senders of such communications did not wait to read the second instalment of the article upon "Diphtheria," which dealt with "treatment."

In outlining the therapeutic steps neces-

Acids acetic, butyric, valeric, sulphuric; ammonia, leucin, leucein, tyrosin, indol, skatol, cresol, phenol and HCs are toxic.—Bouchard.

sary I distinctly advised the use of antitoxin "early, if at all—and in large doses." Moreover, the method of injecting serum, the doses usually used, etc., received full attention. It is not always possible to obtain serum at all, and still more often is it difficult to secure reliable preparations of known strength and freshness. In such cases it certainly is desirable to know how to treat this disease effectively—and the method outlined by me will in my opinion give as prompt and satisfactory results as could possibly be obtained with antidiphtheritic serum. If one practises in a locality where antitoxin can be readily obtained it should be used (and used promptly), but when such conditions do not for any reason exist the doctor should institute such therapeutic measures as are known to control the disease and not waste time or thought upon the serum treatment. "There are more ways than one of killing a cat"—and the Klebs-Loeffler bacillus!

I would here, also, state briefly a fact already given publicity by me in another journal (*The Wisconsin Medical Journal* for July) relative to the use of hydrogen peroxide in diphtheria and membranous croup. Twenty minims of full strength peroxide will, if injected into the tissues of the thyroid with a hypodermic syringe, cause a prompt disintegration of membrane. When a child is suffocating and death is very close the prompt use of H_2O_2 in this manner alone will save life. The action of the peroxide is remarkable, the membrane becoming, within a few minutes, shriveled, loose and easily detached—without bleeding—and the patient usually coughs it up in large pieces. The rest gradually disappears. Since announcing this fact (which I discovered under dire stress) a physician writes from Tennessee that the method saved two lives for him (the patients being children "given up" to

Feces are toxic from potash and ammonia, an alcoholic extract, bile and the residues of putrefaction.—Bouchard.

die), and another practician recites an interesting case in which death seemed imminent but the injection of peroxide caused prompt destruction of the membrane, which was expelled almost *en masse*.

GEO. H. CANDLER.

Chicago, Ill.

CORRECTION.

The author of the article which appears on page 1222 of the September CLINICAL MEDICINE is Dr. W. H. Smith, of Kansas City, and not H. W. Smith, as printed. Also in this article in the last sentence of the second paragraph on page 1224 instead of "united" should read "uncombined." Dr. Smith is one of our old friends and a well known teacher as well as practician.

THERAPEUTIC NIHILISM.

This seems to be a very important topic now-a-days, and rightly it should, when one finds our young doctors just from college advocating x-ray, hydrotherapy, vibration, massage, or the scalpel in most of their cases (in lieu of something better) which would respond to the right kind of medication readily.

Many practicians limit themselves to the use of five or six drugs, as opium, mercury, iodides, arsenic or bromides, and would gladly throw up the sponge and quit practice if they were compelled to use any other so-called non-specifics. If many spent as much time studying therapeutics and direct drug application as they do preaching therapeutic nihilism, the laity and profession would be much better off, and many quack drug firms would cease to flourish and prosper. When one finds patients suffering from systemic poisoning due to the bowels being loaded with fecal matter, skin hot

Aqueous extract of putrid matter is very toxic, that of feces slightly; alcoholic ext. of feces very, of putrid little.—Bouchard.

and dry, kidneys inactive, fever, and great abdominal pain, and each succeeding doctor has diagnosed the case as gallstone colic, appendicitis, or inflammation of the bowel, and either gives a hypodermic of morphine, or, if he has forgotten his hypodermic case, leaves some codeine tablets and assures the patient she will soon be well, but, as for some reason the opiates have lost their antiseptic or laxative power and the patient is no better, is it any wonder doctors lose faith in drugs, and the laity, in turn, lose their faith in doctors?

Do not think I underestimate the value of morphine in certain cases where it is indicated, for it is very useful, but the more I practise the more I believe in the "clean out and clean up" system and then a few well chosen drugs that are directly indicated will do the rest in many cases.

As to the different kind of drugs, I, like many others, have used the old dirty fluid extracts and uncertain tinctures and had my successes and failures—and maybe mostly failures—from never knowing just what action we would get, or just how much we were giving either. I began using the alkaloids or active principles very cautiously, as I liked to know just how much drug I was giving and just what results to expect, and my results have been such that I am still using them and adding new ones as fast as possible. I have just ordered saline laxative in five pound lots (as I do my own dispensing and find it highly satisfactory), and think it forms an excellent basis for most ordinary cases one comes in contact with in general practice.

Please do not think I am criticizing the methods or ways of my fellow brethren, for we all make mistakes, and I have made mine, and expect to make more, but the sooner we discard the old crude drugs and preparations and learn direct active-prin-

Intestinal disinfection by charcoal diminishes the toxicity of urine by one-half to two-thirds.—Bouchard.

ciple therapeutics, the better and more satisfactory it will be for ourselves as well as for the laity.

M. B. STINE.

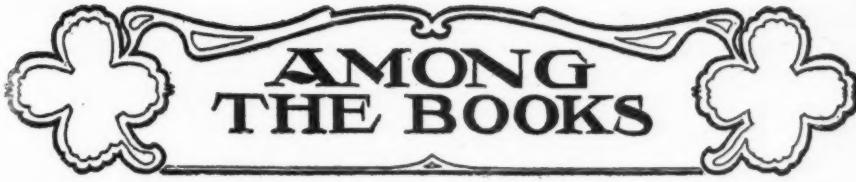
Crooks, S. D.

CANNABIS IN DELIRIUM TREMENS.

Some of the uses of Cannabis Indica are described by Dr. Elihu B. Silvers in the *Journal of the Medical Society of New Jersey*. He had used this remedy in connection with tolu as an anodyne, as a hypnotic, with compound tincture of benzoin in spasmodic coughs, with digitalis in dropsy, with potassium acetate in spasm of the bladder; it occurred to him that if it would readily induce sleep in nervous cases it ought to be useful in delirium tremens. He has now used the remedy for this purpose for forty years without the loss of a single case, although, as city physician, he has been called upon to treat many of the worst "drunks." He suggested its use to the director of the state asylum for the insane, in alcoholic mania, where it proved satisfactory.

Cannabis is undoubtedly a useful remedy, though unfortunately the tinctures on the market are not always to be depended upon. In various nervous pains, tickling coughs, insomnia, and delirium, from a variety of causes, it may prove the remedy of choice. Wood's description of the peculiar, dreamy prolongation of time and space under its use has become a classic. Look up his *Materia Medica* and read it if you have not already done so. Cannabis has a tendency to produce delirium; this may be combated by veratrine, or by cicutine, if movement is prominent. In headaches the action is intensified by small doses of acetanilid and in insomnia by hyoscine or camphor monobromide. In delirium tremens it may be well to first vomit with apomorphine, or conjointly stimulate with capsicum.

With bismuth salicylate the fecal matter is blackened by formation of bismuth sulphide; urine contains salicylic acid.—Bouchard.



AMONG THE BOOKS

PRACTICAL MEDICINE SERIES.

The Practical Medicine Series of Year Books. This series gives ten volumes every year in intervals of about one month, and each volume gives a review of what was done by the profession the world over during the year preceding the publication of the volume, which is devoted to one or more subjects in Medicine. The price for the ten volumes is \$10.00, and the separate volumes range from \$1.25 to \$2.00. Published by "The Year Book Publishers," 40 Dearborn Street, Chicago.

The benefit of this series is that the physician can keep himself informed of the latest new or the reinstated old point in medicine to date by reading one small volume each month. We have followed this series for some years and have always admired the judicious selections by the several contributors. We lack the space to say all we could in recommending this series to the general practitioner, and our good will must be taken for the deed. The General Editor is Dr. G. P. Head, and the contributors are all eminent practical men of Chicago.

The first three volumes of 1906 before us are: (1) General Medicine (section 1), Professors Frank Billings and J. H. Salisbury; (2) General Surgery, Prof. J. B. Murphy; (3) Eye, Ear, Nose and Throat, Prof. A. H. Andrews, and G. P. Head.

COTTON'S "DISEASES OF INFANCY AND CHILDHOOD."

The Medical Diseases of Infancy and Childhood, With Points on the Anatomy

and Hygiene Peculiar to the Developing Period, by Prof. A. C. Cotton, of Rush Medical College, Chicago.

This valuable monograph is one of Lippincott's New Medical Series. In 1900 the author published "Lessons on the Anatomy, Physiology, and Hygiene of Infancy and Childhood for Junior Students." This unique monograph marked the author as an original observer in pediatrics. The present work of the author betokens the same characteristic originality. To be sure, an originality may be that of the spider's web and be valueless compared with the derived collation of the bee's honey. But when the matter of a book is both original and eminently useful too, we are at once arrested by it in our day of easy "endless book making."

There are many good books on pediatrics of more distant, recent, and most recent date, and there are more to come, and you may have them all or most of them in your library, but your collection will be decidedly incomplete without Cotton's book.

Publishers, J. B. Lippincott Company, Philadelphia and London, 1906, \$3.50.

DEWEES' "CONJUGAL RELATION."

The Conjugal Relation, or Sexual Hygiene, by William B. Dewees, M. D., LL. D., is a valuable essay read before the Social Science Club of Salina, Kansas, February 22, 1904. It came to our notice unexpectedly and surprised us with its valuable contents on a subject often mishandled, or, ostrich-foolish, the sight hid from it. We found out that the author has some hundred or more copies on hand. He told us to set

a price on it. We know the pamphlet is very valuable, but business is business, and so we say 25 cents. Try this and send for the essay to the author, 542 S. Santa Fe Avenue, Salina, Kansas.

**BAUMGARTEN'S "INSOMNIA."—ROSCH'S
"MARRIAGE RELATION."**

Insomnia, by Dr. A. Baumgarten, B. Lust, Publisher, New York. Price 15 cents. Kneipp's methods are the remedies recommended here.

The Abuse of the Marriage Relation, explaining the origin of most chronic diseases of women. By Dr. E. Rosch. Published by the above. Price, 25 cents. It strikes us to ask: Is there not an abuse of premarriage relations as a cause?

THE PHYSICIAN'S INTERPRETER.

The Physician's Interpreter in four Languages, English, French, German and Italian, specially arranged for Diagnosis, by M. von V., Philadelphia. F. A. Davis Co. 1906, \$1.00

Between each two pages there are two blank ones for memoranda, size $5\frac{1}{2} \times 3$ inches, opening at the end, flexible leather bound, round corners, gilt edges. Altogether a dainty and very useful linguistic help in practice in many a place in the United States, where we have, *nolens volens*, to be a polyglot.

POLK'S "MEDICAL REGISTER."

Polk's Medical Register and Directory of North America, Ninth Revised Edition, 1906. \$10.00. R. L. Polk & Company, Publishers, Detroit, Baltimore, Chicago.

The book is six by nine inches and nearly five inches thick, measuring leaves only.

Giving iodoform we find a little iodine in the urine and the stools contain some free iodoform.—Bouchard.

Looking at it from a contemporaneous historic point of view we can assert that the book gives an adequate idea of the immense social importance medicine occupies in North America against which the noisy clamor of anti-drug and anti-matter fanatics hardly finds the show of an echo. The usefulness of this register for the educational and commercial interests of medicine is beyond computation. Space will not permit to give even an outline of its contents but it would be a winning challenge for any one to show anything of the remotest interest to scientific, practical, industrial and commercial medicine in North America that is not to be found in this directory.

**DAVID'S "MENTAL AND PHYSICAL
CULTURE."**

Mental and Physical Culture for the Little Ones, Before Habits are Formed. By Aumond C. David, 993 New Hampshire St. Los Angeles, California. 40 cents.

This is printed on a bluish gray paper seven by twelve inches, containing fourteen pages, illustrated with twenty-five pictures showing how to conduct the physical culture. With this, too, the author will send one copy of an excellent talk which he entitles, "Revelation." The spirit which breathes through the pages of these unpretentious works is of the "advanced" kind, but altogether inoffensive—not heaven- and earth-storming, as in the manner of some self-styled and self-appointed reformers of the present day. The author evidently loves to do good and to communicate to others what a love of purity and truth has made him to know by intuition. If we think and learn with our free individuality we will learn much good from this excellent author, whether we agree with him in all points he makes

Naphthalin is almost insoluble but enough is absorbed to color the urine a brownish black.—Bouchard.

or not, for in either case we get clearer ideas of our own thoughts and thinking.

FOWLER'S "SURGERY."

A Treatise on Surgery. In two volumes. By George R. Fowler, M. D., Emeritus Professor of Surgery in the New York Poly-clinic. Two imperial octavo volumes of 722 and 714 pages, comprising large and very useful indexes. Illustrations are numerous and to the point always. Publishers, W. B. Saunders Company, Philadelphia and London, 1906. \$15.00 per set.

The work is an educational masterpiece in the science and art of surgery as these have won the admiration of the critical judgment of the day. The boldness of surgical operations is no new thing in our age, these existed in all ages and were practised by both ignorant and learned men then and, alas, sometimes now, too. The glory of present-day surgery is its learned thoroughness in all that appertains to the biology, chemistry, physiology and pathology of living tissues and the treatment that grows out of the combined knowledge of these. It is in the teachings of these that the volumes before us excel.

DAVIS' "PHILOSOPHY OF LIFE."

The Philosophy of Life, by Charles Gilbert Davis, M. D. The D. D. Publishing Company, 4630 Grand Boulevard, Chicago, 1906. \$1.25.

The book is five and one-half by seven inches, printed on very heavy deckle-edged paper, presenting an appearance peculiar enough to distract apprehension of having here another of the heaven and earth storming "new thought" books before us. The author is a physician and surgeon of Chicago's eminent ones. His volume is, as he

Taking naphthalin, grs. 75 daily, the feces lose odor and toxicity, putrefaction being entirely suppressed.—Bouchard.

says, "not an argument," but "an assertion" that mind is dual, mortal and immortal, that suggestion acts for good or evil, as the mind chooses, that accordingly it can make happy, healthy and wise, or wretched, sick and foolish. And these thoughts the doctor elaborates as a scientific man and not as a partisan anti-drug and anti-everything in medicine and surgery, as the manner of the prevalent no-matter fanatics and fanaticisers of today is. Hence we commend this book of a thinking mind to similar ones. We commend it for thinking neurasthenics who are ready to fall into the hands of religious or anti-religious, medical or anti-medical quacks, or fanatics. It will give help to such because they are here directed to the power of desire (which can be exercised by the very powerless) and not, as is often done, to will-power which most people, patients especially, are entirely without, at least as regards the choice of good. This fundamental idea of the book atones for some points in it which we would controvert were we to write a philosophic critique of it. As it is we commend this "Philosophy of Life" for the practical good for which it is written.

SAUNDERS' NEW BOOKS.

Messrs. W. B. Saunders Company announce for publication in the early fall the following excellent and practical works:

Keen's Surgery: Its Principles and Practice (Volume I).

Sobotta and McMurrich's Human Anatomy (Volume III).

Webster's Text-Book of Gynecology.

Hill's Histology and Organography.

McConnell's Pathology.

Morrow's Immediate Care of the Injured.

Stevenson's Photoscopy (Retinoscopy and Skiascopy).

Disinfecting feces by naphthalin the urine becomes harmless as long as the digestive antisepsis lasts.—Bouchard.

AMONG THE BOOKS

Preiswerk and Warren's *Atlas of Dentistry*.

Goepp's *State Board Questions and Answers*.

Lusk's *Elements of Nutrition*.

The most notable announcement is the new work on *Surgery*, edited by Dr. W. W. Keen, complete in five octavo volumes, and containing over 1,500 original illustrations. The entire work is written by the leaders of modern surgery—men whose names are inseparably associated with the subjects upon which they have written. Without question, Keen's *Surgery* will represent the best surgical practice of today.

LECTURES ON NURSING.

We have been supplied with a complete set of the lectures supplied by the Chautauqua School of Nursing, whose announcement will be found in our advertising columns. We have been favorably impressed with them—their thoroughness, the accuracy and practical value of the information offered, and especially with the fact that no effort is made to make doctors out of these correspondence students. It goes without saying that the mere study of these lectures will not make a young woman a nurse; also that such study cannot take the place of hospital training. But we are also sure that such a course of correspondence study will prove of inestimable value to many women—to every woman who is likely to have to deal with sickness in her own or other households. There is a good field, especially in the country, for women who have qualified by taking such a course and by practical experience in nursing under the supervision of the family physician, to take the place of that *bete noir*—the neighborhood "granny." The lectures themselves

Vascular changes cause dryness and itching of the skin, due perhaps to nutritive disorder of the cutaneous nerve ends.—Bouchard.

are excellent and we take pleasure in commending the course to physicians and their friends interested in nursing.

STATE BOARD OF HEALTH REPORTS.

We thankfully acknowledge the receipt of the Annual Reports of the State Board of Health of the State of Michigan for 1903, and of the Annual Report of the State Board of Health of the State of Ohio for 1904.

We desire to call attention of those of our readers whose attention needs to be called to the fact, that in the study of public sanitation, prophylaxis, and drug sale regulation, there is no source from which we can get so much useful knowledge as from such reports, especially from states like the above, where scientific and progressive medicine is much at home. The distribution of these reports is gratis, and the studious should avail themselves of them.

HIRST'S "DISEASES OF WOMEN."

A Text-Book of Diseases of Women, by Prof. B. C. Hirst, second revised and enlarged edition. The advantage which we have recorded of the first edition of this excellent book, that it is reciprocally supplemental to the author's work on obstetrics is equally true of this second edition. We repeat what we have said in the December *ALKALOIDAL CLINIC* of 1903: "These excellent works go together, emanating from the rarely combined qualities of a natural researcher and scholar, who has an extensive and successful private and hospital practice, and who has long been a didactic and clinical teacher."

Publishers, W. B. Saunders & Co., Philadelphia, Pennsylvania, 1905. \$5.

While urine is normal in quantity and density the kidneys functionate normally; when both decrease there is danger.—Bouchard.



CONDENSED QUERIES ANSWERED

PLEASE NOTE.

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

ANSWERS TO QUERIES.

ANSWER TO QUERY 5067.—In making a diagnosis of this particular case, which has been designated as hemophilia, it is almost impossible to state whether the full conditions set forth by the writer are complete. In one paragraph he states there is discoloration of the skin (due to the slightest injury). This is unusual in hemophilia, as the hemorrhages as a rule are not subcutaneous, and if the history is traced I believe the doctor will find this condition occurs spasmodically by the rupturing of the small blood vessels due to congestion and loss of tonicity, producing consequently a breaking down of the same.

A case of this character occurred in my practice. After careful examination I diagnosed it purpura hemorrhagica and placed her on (suitable treatment?) ergotin, hypodermically, tonics of iron, etc., and restricted all kinds of stimulants, coffee, tea, alcoholic drinks, with no benefit. One evening she had a severe attack of epistaxis and was hurriedly sent to a hospital, where her condition was diagnosed (typhoid) and for twelve days she remained in the typhoid ward before the proper diagnosis was made and she was removed to another ward. As she did not improve she demanded that her mother take her home and send for me, as I had previously treated her. Upon my examination I found, a pallid girl, terribly anemic, ecchymosis entirely gone from extremities, waxy skin, loss of color, especially in lips and ears, glassy eyes, shallow breathing and exhaustion complete, respiration 24, temperature 98 1-5° F., pulse thready running 102 beats per minute, no headache or pain, just prostrated from exsanguination. I immediately placed her on cactus grandiflorus to tone up the cardia and as I have had

marked results with atropine sulphate, gr. 1-500, in hemorrhages, I placed her upon this treatment: one cactin granule every half hour until pulse was firmer and dropped to 80 beats, then less frequent. Atropine, one every half hour for four doses, then one every two hours until physiological effect, then one every three or four hours. I have kept her bowels flushed and antiseptic. Since this treatment she has had no hemorrhages, and is able to take more substantial food. During her confinement in bed I placed her upon a semi-solid diet, and as she is gradually regaining strength I have allowed solid food.

A. E. SMETHURST.

Philadelphia, Pa.

The case which you describe is a very interesting one and your treatment was certainly good, no matter by what name you called the disease. After all, names do not mean very much. It is the essential condition which we are trying to get at, and the successful practician is the one who does not bear down too heavily on mere name diagnosis; but recognizing the diseased condition, applies the indicated drugs.

Purpura hemorrhagica is after all not a disease, it is merely a symptom, and the same is true of hemophilia. To make a careful diagnosis, it is necessary to go into the history of these cases, to find out if they really are "bleeders" or if the symptoms are of late development and temporary in character. In the case reported in the query the data is insufficient to be assured upon this point, but we accepted the doctor's

statement that the case was one of hemophilia and we see nothing in his report to positively contradict this.—ED.

ANSWER TO QUERY 5067.—There are so many "smart" men to write you that I feel like a school boy writing his first composition. But you have asked all for something, and I will answer Query 5067 or tell you what I do and how I have been successful in treating three cases of menorrhagia in the last few months. Of course they were not girls, but married women. I give one granule of atropine, gr. 1-250, every hour, and flush the capillaries. Then I give a teaspoonful of lupulus (f. e. hops) every four hours, and it always gets the desired results, and I have used it in many bad cases, and it has never failed in my hands to check the worst hemorrhage.

Now, Doctor, I know so little, I feel I should be inquiring of you and others. Do not think that I offer this because I think it is new or because it is my own "get up." Far from it. I learned it from another, but hope it may serve someone as well as it has me. I always feel sure of success with these remedies in this class of troubles.

B. F. DYKES.

Arran, Fla.

ANSWER TO QUERY 5094.—"Pterygium." I cure this trouble with watery extract of *pinus canadensis* painted on the pterygium twice daily. Or use Lloyd's *thuja*, non-alcoholic, diluted one-half with soft water. Apply once daily. Or, if you will apply a little calomel to the pterygium night and morning you will soon be rid of the trouble. Or brush it twice a week with a solution of nitrate of silver, grs. 3 to the ounce of water, following in a few seconds with a little pure olive oil; if too much irritation follows use a soothing eye water. A weak borax solution will do.

Z. W. HENDERSHOTT.

Mill Shoals, Ill.

ANSWER TO QUERY 5103.—"Venereal Warts." You give some suggestions as to the treatment and removal of the pesky

Urine of 1019 s. g. daily output 1350 cc. is right for a man walking and eating well but too high for the sick.—Bouchard.

things. I want to tell you what I did to eight or ten of them and what happened to them. After cleaning them off with a little alcohol, and covering them with calomel, I looked for some means to make the calomel stick. Looked for collodion, and it was out as usual, but the bottle of corn cure (collodion, salicylic acid, *cannabis indica*) was full. I used it. Smarted some, but soon quit. Result: never had to dress them again. Completely disappeared within a week. Was it a coincidence?

ANSWER TO QUERY 5094.—"Treatment for Pterygium." Its growth can be stopped by the use of the galvanic battery. Attach the rat-tooth forceps to the negative end of the battery, catch up the growth, including the blood vessels, and turn on the current, using from 3 to 5 ma. till the vessels turn white. Repeat the process in three or four places. If any of the growth is left in a week or ten days, give another treatment. I have used this method a good many times with good success.

ANSWER TO QUERY 5084.—"Orchitis." Treat all such cases with the galvanic battery. Use Neiswanger's varicocele electrode, covered with cotton wet with a solution of *phytolacca*. Use positive to the testicle, 10 to 15 ma. for twenty to thirty minutes. Follow this with the high frequency vacuum tube (positive) for half an hour, or till the soreness is gone. Usually one treatment will suffice to make a cure. I have never had to give over two or three. Perhaps the case referred to in Query No. 5084 would not yield to such treatment, but I would give it a chance before advising operation.

You can see by the above that I use electricity to some extent. I began it in 1896 and use it more and more in my practice. Very few cases come my way that do not get some form of physiological treatment. Massage, Swedish movement, vibrations, electricity, etc., serve me well.

J. H. DAVIS.

Washington C. H., Ohio.

—:o:—

We are glad to get such a nice lot of "answers," but we ought to have as many every month.—ED.

In men who retain their toxic products all cells have weakened vitality bordering unresolved inflammation.—Bouchard.

QUERIES

QUERY—5104.: "Glanders," We have several cases of supposed glanders among horses in this neighborhood. Do you not think that an examination of the blood is the only way to make a positive diagnosis? We have had the mallein test in fourteen horses, and the one supposed to have brought the disease to this country stood the best examination of any. There have not been any cases among the people but all are becoming alarmed. Is there anything that would favorably influence this dreaded disease? What do you think of calcium sulphide as a preventive and curative agent? Is there great danger to the people? I have read that it is highly contagious.

R. H. Mc. B., Arkansas.

In animals the best method is to treat with mallein, for which the Pasteur Vaccine Co., Chicago, furnishes material and directions. It is too expensive and not satisfactory to isolate the bacilli mallei. A microscopical test of blood or pus can be made. Make a dozen thin smears of blood on microscopical slides, dry in air, and send into our laboratory. If possible make four or five smears of pus in same manner as for blood. The charge will be \$5.00. Glanders or farcy is a distinctive disease of the horse and may be transmitted to man. The bacillus is the bacillus mallei and is easily recognized. However when found in human sputum they cannot be satisfactorily identified but a culture must be made and the lower animals inoculated. The organism resembles the tubercle bacillus and is motile and decolorized by Gram's method. An alkaline potato culture after two days at a temp. of 37° C. presents slimy, drop-like colonies which range in color from honey yellow to copper red. Potato about these is deeply stained. People who are not in direct contact with the horses affected are not liable to develop the malady. The nasal mucosa is one road of infection. Usually, however, a break in the skin is the

primal point of infection. The symptoms are, general malaise, fever and stiffness appearing about four days after infection; a circumscribed red swelling develops which breaks down shortly into a granulatomous mass. The nasal mucosa ulcerates and pus is discharged; the glands may become infected and break down; septic papules develop about the face and joints and if the lungs are involved there is a cough or even a septic pneumonia. Death follows in seven to ten days. In local infection (fancy) acute localized swelling occurs with some glandular enlargement; small swellings present along the lymphatics and these are the fancy "buds" they break down slowly. Not uncommonly a septic arthritis follows, but rarely is there any nasal involvement. Death takes place in most of these cases in from twelve to fifteen days. The best thing to do is to saturate with calcium sulphide and echinacea. Purge well, inject nuclein hypodermically in full doses, and excise widely the point of infection. The actual cautery is to be recommended at seat of lesion. Drain well under antiseptic dressing. Were we to have a case we should proceed thus: Cleanse and excise well any lesion discoverable (knife or cautery); inunctions of ung't Credé twice daily, using a half dram at a time. Local compresses of creolin solution. A brisk purge with blue mass and soda and salines; nuclein (hypo) ten drops, thrice daily. Calcium sulphide gr. 1-3 every hour, and echinacea three tablets or ten minims of sp. tr. every two hours. Pilocarpine to effect, the "hot pack," and weak creolinized epsom-salt sponge baths twice daily. Beef juice, stimulants and easily assimilated but highly nutritious food. Inhalations of eucalyptolized steam or formalin vapor and nasal douches of H_2O_2

Many accidents called uremic occur when in nephritis the retention of toxic products is inadmissible.—Bouchard.

Uremic cases seen clinically are so varied that we must think of varied and mixed pathogenic conditions.—Bouchard.

and water equal parts, followed by any good alkaline antiseptic. Eucalyptol might well be given locally. Guaiacol has been suggested as a local antiseptic. We doubt its efficacy.—ED.

QUERY 5105.—"Thiosinamin as a Solvent of Cicatrical Tissue." Will you kindly tell me what you know about the use of thiosinamin in the absorption of scar tissue resulting from a burn, and also give me the name of any new work on skin diseases that might explain the use of this drug internally and hypodermically. The scar tissue in this case might practically be called a keloid growth.

G. B. S., Kentucky.

We can only tell you that thiosinamin proves very effective in many cases, removing scar tissue slowly but positively. We are at the present time testing the drug out thoroughly, and while results vary, they are generally satisfactory. The drug may be used internally or hypodermically; it is soluble in water, alcohol and ether. It is useful in stricture, corneal opacities, deafness due to adhesions of ossicles, etc., and in lupus, glandular tumors, cicatrices, etc. One to two grains should be *injected* in a glycerin aqueous solution every three days, preferably in the gluteal muscles. We do not believe that any great advantage is gained by injecting it into the scar tissue. Internally give 1-2 grain gradually increased to 1 1-2 grains twice daily in capsules or in an alcoholic menstruum. We know of no work in which this drug is practically discussed.—ED.

QUERY 5106.—"Hyoscyamine In Delirium Tremens." I have been a reader of CLINICAL MEDICINE for a year or more, and have been convinced for a long time that the principle of alkaloidal medication is correct, but it is hard to break away from the old established order of things. I now have a 39-vial case filled with alkaloids and am going to "do business!"

Marked loss of urinary toxicity from the second month of pregnancy may be due to increased hepatic elimination.—Bouchard.

The following is a short case history; man, age about 28, single, glass worker, had been drinking heavily and at the end of a week had delirium tremens. I had a 9-vial case of alkaloids and in this case were some hyoscyamine granules. I gave the patient these granules freely and in three or four days patient was well. This happened a year and a half ago. Same patient had same kind of a case two months ago and I gave him the crude drugs and he was down for three weeks. Do you suppose the alkaloids made any difference? I don't know why I didn't think of the hyoscyamine, but I didn't.

E. C. D., Kansas.

Hyoscyamine is known to be extremely efficacious in delirium tremens. The crude drug or preparations thereof are notoriously unreliable, containing various (or no) active ingredients, any one of which may preponderate. In your next case of this kind use apomorphine in small doses and note the results. Strychnine valerianate, avenin and hyoscyamine with full elimination will be the other remedies. Also remember the nux and capsicum formula later, and do not forget, Doctor, that camphor water and aromatic spirit of ammonia equal parts (one dram of each) in water is an excellent "sobering preparation."—ED.

QUERY 5107.—"The Matter of Proper Fees." You have frequently through the JOURNAL cautioned against charging for medicine, insisting a fee should be charged according to the importance of the case, etc., which I would like to be able to do. But through the country, small towns, and even some large, most doctors have a 50-cent medicine price for most ordinary office practice and house visit, "so much" no matter what the trouble. If you have time will you tell me about how you would go about establishing proper fees and an "understanding" among the rural people?

J. R. L., Illinois.

Let us refer you to the "Alkaloidal Digest" page 105. We could not say any more were

Ammonemia may particularly arise in cases where intestinal fermentation is increased, but cannot explain uremia.—Bouchard.

we to write for a year. You will have to take your good patients and teach *them* and they will pass you on to the more desirable of their friends as the best in your line, so in a year or two you get a select practice, and other people hearing of you and your success will send for you. To them you can explain your mode of procedure and they will usually gracefully comply. Here is a point: When a patient comes to your office he comes to consult *you*, and the *work* you do (whether you do it with a knife or a speculum or a bottle of medicine) is what he pays for. The charge should be, for office procedures of this kind, one dollar at least, this of course including ordinary medicine. We know that it is difficult to get a proper fee in many communities, but the writer would no more think of accepting a dollar fee than he would of charging \$100. When you have an acute case tell the patient that your desire is to cure the patient as rapidly as possible and that you are going to the house just as often as you deem proper and *only* as often as you deem it necessary; then, charge a reasonable fee, basing your bill upon the capacity of the family to pay you. Do not charge a poor man \$100 for bringing him through typhoid even if you do have to go every day or twice a day for two weeks, but if you bring a rich or "going-to-be-rich" man through, or save the wife or child of such a one, do not hesitate to charge a round sum. If he kicks at the amount ask him if he would have preferred a longer illness or a funeral. Tell him that you keep yourself up to the times, practise the best methods, use the best drugs, inflict no drug bills upon your patients, and give them the benefit of the latest scientific discovery by reading the latest books, journals, etc., and he would be a fool indeed who would desire you to cut your bill. With these suggestions we feel sure you can start

on the right road.¹ Ask any definite questions you may wish, Doctor, and we will answer them.—ED.

QUERY 5108.—"Cholera Infantum." I was treating a case of cholera infantum when I received the intestinal antiseptic. I cleaned out with calomel, castor oil and salines and had about five days in which to exhibit the sulphocarbonates before the child died. I was in constant attendance, but to no avail. I began with 1 gr. doses every hour, gradually increasing the amount, till before she died I was giving three grains in solution at like intervals. There was no improvement in pulse, temperature, or any other way from the time of onset till she died on the sixth day. Patient twenty-one months old, well nourished before taking sick; bottle fed. I considered the case one of "acute milk infection." In a case like this one if you cannot get benefit from an intestinal antiseptic it is practically of no use; in a simple case of autoinfection after you clean out the patient is well.

A. L. A., Iowa.

We regret your unfortunate experience with the case of acute milk infection. Do not, however, for one moment condemn the sulphocarbonates because you, in one case, failed to secure results! When thousands of other men are able to positively control such diseases in 90 per cent of their patients, you surely can do the same—provided that you do the right thing at the right time and push the indicated remedies to effect. Now, Doctor, cholera infantum and the summer diarrhea of infants are two different conditions and the treatment differs. But in "acute milk infection" you will find it best to exhibit first calomel and podophyllin, then salines, then high antiseptic enemas and the sulphocarbonates in "dose enough to secure results," preferably in solution. All food must be stopped for twenty-four to thirty-six hours except albumen water, beef juice, barley water and pure cold water.

Urea represents 1-7 of the total toxicity of urine; ammonia same; coloring matters 2-5; minerals the rest.—Bouchard.

Chloride is the most toxic salt of potash, 18 cgrms killing a kilo of animal; the phosphate requiring 26 cgt.—Bouchard.

The body should be sponged, the mouth kept clean and the child be placed in the fresh air out of the sun.

Small doses of hyoscyamine are given usually to relieve the local congestion and brucine and cactin (or digitalin) should be exhibited to support vitality and equalize circulation. Occasionally minute doses of veratrine are called for and nuclein is invariably useful. Too many men try to render aseptic a loaded intestine, forgetting that frequent stools do not mean an empty bowel. Others, while seeking to destroy bacteria with one hand, feed the child material which serves as an excellent culture medium with the other.

The enteric diseases of children cannot always be controlled with the sulphocarbonates *alone* (though if they are given in efficient doses the patient receiving them will have a better chance than another under any other method of treatment not including these salts) but with the intestinal antiseptic and proper alkaloidal treatment generally we can save nine out of ten of our severest cases. What more can we expect?

All the trained nurses and frills imaginable will not make up for the failure to give *enough* of the *needed* remedy at the *right* time and all the medicines going will not serve to save a child (unless we are playing in wonderful luck!) if we allow it to receive improper food and forget to insure a debris-free intestinal canal. Try again, Doctor, and see that there are no weak points in your treatment; the sulphocarbonates will disinfect the bowel satisfactorily.—ED.

QUERY 5109.—"Supposed Walking Typhoid." Girl, 22, looks healthy, complains of general aching, head and backache, abdomen sore, worse on reaching up for anything, or after short drive; tongue frosted, slight persistent cough, face seems bloated; urine s. g. 1015, daily output 80 ozs., in-

Prevost and Binet found nothing so much increased the secretion of bile as bile and salts of bile acids.

dicating excretion of 1320 grains of urinary solids, no albumin or sugar. Sleeps but half the night. With calomel, cathartics and antiseptics the tongue remains coated and she has no appetite. No relief from large doses of bromides.

S. G. M., Ohio.

The persistence of digestive disorder, anorexia and coated tongue, indicate that the bowels have not been thoroughly emptied and disinfected. Try the coal oil enema, thrown into the colon, and followed in half an hour by a copious soapy enema. Give arecoline and physostigmine to stimulate colonic peristalsis, gr. 1-100 each twice a day or more if needed. Keep her on oil of eucalyptus, five drops three times a day, until the tenderness subsides, with absolutely only liquid foods. If the stools show pus and blood, indicating ulcers, keep up this until they cease to appear.—ED.

QUERY 5110.—"Gastralgia." Woman, 40, uricacidemic, rheumatic in early life, suffers neuralgic pain from stomach to between scapulae, no food agrees, fallen from 185 to 135 pounds, still losing, urine scanty, s. g. 1020 to 1035, no albumin or sugar, urate and phosphate waste large, constipated, palpitation at times. She obtained most benefit from the Woodbridge tablet No. 2, containing podophyllin, gr. 1-960, calomel, gr. 1-16; guaiacol carbonate, gr. 1-4; menthol, gr. 1-16; and eucalyptol. They seem to immediately relieve the gastric pain, which comes immediately after eating and again several hours later, the latter far more painful.

S. G. B., Ohio.

We get tired of saying it, and we know that the constant iteration gives us the reputation of being faddists on the subject, but we must insist that whenever a case proves obstinate we should begin by completely emptying the bowels, and this may be done by calomel and podophyllotoxin, followed by salines, or may also require enemas of soapsuds, saturated salt solution or even kerosene.

Increase bile—pot. chlorate, sod. salic., salol, sod. benz., euonymin, muscarine and possibly oil of turpentine.—P. & B.

Then, examine this woman's abdomen and ascertain if she has a dilated stomach, or a pyloric stricture, or a gastric ulcer. Do not put too much stress on the time of pain after meals—we have seen Da Costa himself puzzled over such a case. How do the tablets afford relief? By the stoppage of fermentation? By local stimulation? Calomel does not act so quickly, but we have known calx iodata to instantly stop fermentation, waterbrash and gastralgia. Give her a two-grain tablet of the latter whenever gastric pain occurs, feed exclusively by the rectum and vagina—which is better—for a week, while the bowels are kept strictly clean. Meanwhile empirically "try" (how we detest that word) condurangin, gr. 1-67, four times a day.—ED.

QUERY 5111.—"Ulcer of Mouth." Mother of two children, two miscarriages, last six weeks old; five brothers and sisters all died of tuberculosis; is quite well except for recurring ulcers about the mouth since girlhood, one now on side of tongue 1-4 by 1-2 inch. She is somewhat of a bleeder.

J. A. X., New York.

The hemorrhagic tendency and the obstinacy with which she resists treatment as well as the strong tubercular history all point to a deficiency of lime. Give her calcium lactophosphate, ten grains a day, for several months, and increase the vitality of the feeble tissues by applying nuclein solution to the ulcers three times a day. Keep the bowels clear and if necessary disinfect them with calcium sulphocarbonate, 40 grains a day.—ED.

QUERY 5112.—"Gastritis." Woman, 37 years, has had gastritis twenty years, much tenderness all over abdomen and especially in right hypochondrium front and back, tongue coated, constant occipitoparietal headache, left arm, hand and leg numb, hands and feet cold, head jerks back some, feels badly on rising and head aches on re-

Increase bile little if any—soda sulph. and bicarb., aloes, rhubarb, hydrastis, boldo, coal tars, Carlsbad salts.—P. & J.B.

turning to bed. No fever, constipated bowels hard to move, stools contains much mucus, cannot sit up for pain in head and spine. The only drug that does not irritate her stomach is copper arsenite.

E. F. P., Michigan.

Whether the meningeal irritation is due to actual disease or to the presence in the blood supplied these tissues of the toxic products of imperfect digestion, the indication is clear. Completely empty the bowel by colonic flushing, with podophyllotoxin, gr. 1-6, at bedtime and saline laxative in hot water every two hours during the following day. Examine the stools and the abdomen carefully and if the bowels are not cleared thus, give a kerosene enema or two. When they are clear the tenderness in the transverse colon will begin to subside if you keep it from filling up again. This is going to be a big job. Nourish her with fluids, raw eggwhites, milk, fruit juices, and soups, till you have the alimentary canal in order. The disinfectant here is sodium sulphocarbonate, 40 grains a day.—ED.

QUERY 5113.—"Ardor Urinae, Post Partum." Woman, 30, confined two months ago, for three weeks her urine burns very much when urinating. What must I do for her? I have had several such cases.

J. A. B., Arkansas.

Suppose you test the urine as a first step and find out whether you have hyperacidity or alkalinity! You do not give us any information as to the conditions present. As you are aware, there is frequently more or less abrasion of the urethra during parturition and smarting is present as a necessary sequence. Our own experience goes to show that concentrated urine is usually present also. In extreme alkalinity of urine benzoic acid with arbutin will speedily bring about a change for the better. If the urine is hyperacid give lithium benzoate in place

Decrease bile—pot. iod., calomel, iron, copper, atropine, strychnine in toxic doses, say Prevost and Binet.

of the acid. This will not in any way affect the child.—ED.

QUERY 5114.—“Arthritis: An Ethical Point.” Patient, about 65, given up as hopeless by many physicians and sent to Florida to get better or die; his hands were drawn up so that he could not open them; he had trouble in cutting food or feeding himself. He suffered great pain in back and all limbs. His suffering led me to suggest calcium carbonate compound, salithia and macrotin, with soap and chloroform liniments. His fingers soon relaxed and could be used freely. Unfortunately, he moved to a house too close to the ground for this locality, and still more unfortunately, we have had much damp, raw weather here this year. He is now able to get around the house in fair shape, to write letters without special effort, is still taking the calcium carbonate and saline and hopes with favorable weather to make a good recovery. Whether he does or not, the improvement has been quite marked and the relief from suffering great. Will you treat this case?

One thing puzzled me: After beginning salithia he suddenly greatly improved, said he felt as limber as a two-year-old child, and capered around in great glee. Unfortunately these spells of relaxation and relief do not become permanent, perhaps because of the changeable weather present.

C. E. J., Florida.

We would much prefer, Doctor, that you treat these patients direct yourself. You know we absolutely refuse to send our preparations to the laity, insisting upon the oversight of a resident practician. Of course if these people place themselves in the hands of a local physician and *he* writes us, we are only too pleased to serve him, but they insist upon sending for the remedies and using them according to their own ideas. Once in a long time they manage to get past our guard and get possession of some alkaloidal preparations. Later a physician comes along and finds them using alkaloidal remedies and straightway puts us down as nostrum

vendors—to which we very much object! You see the point—and we *feel* it, we assure you! Why not take these people and say to them: “You should continue to use eliminative and specific treatment for your disease after you go home.” Give them the proper remedies with directions and tell them to send to *you* for more when the supply is exhausted, then you can write us (giving instructions) and we can ship plain packages with your directions on them direct to the patient. In this way everything will be satisfactory.—ED.

QUERY 5115.—“Angioneurotic Edema.” Girl, age 12, very stout, weighing about 130 pounds, has for about three years been suffering from violent swelling of her hands, feet, and in fact any part of her body coming in contact with cold water. As soon as she puts her hands in cold water they swell to enormous size; the fingers cannot be bent, and there are stinging pains all over her hands. One cannot pit the flesh; it feels as if the parts were distended by gases. When she drinks cold water, or puts a piece of ice into her mouth, the buccal membrane as well as her lips swell up to twice ordinary size. She complains of burning of her mouth and of choking in her throat. When in winter she gets wet with snow, it acts the same way. Dry cold does not seem to affect her, and warm water she can handle without any such effect. The family history is good.

F. R. S., Missouri.

Angioneurotic edema, a typical case of which you describe, is a trophoneurosis, the cause of which we are not able to name. The condition is known as acute circumscribed edema, acute non-inflammatory edema, giant urticaria, periodic swelling, Quincke's Disease, and was first described by Milton in 1878. Raynaud's disease in its early stages, and the peculiar edema which often presents in major hysteria of females (especially during the menopause), may resemble the disease and must be dif-

Don't influence bile—soda phos., pot. brom., HgCl₂, sod. arsen., quinine, alcohol, senna, glycerin, columbo.—P. & B.

Doubtful how bile is influenced by caffeine or pilocarpine, and it probably depends on the conditions present.

ferentiated from it. Acroparesthesia occurs also in women exposed to cold and wet (washerwomen), and may be diagnosed as Quincke's disease. In the latter case, however, the hands alone are affected as a rule and the swelling, pain and itching come on morning and night. The disorder may become chronic. The climacteric, alcoholism, parturition and uterine or ovarian disease may set up the condition. It is peculiar, but angioneurotic edema may also be caused by diseases of the generative organs. This girl is approaching the period of puberty; the writer knows of a woman of forty-eight who cannot put her hands in water at all without setting up angiospasm.

Angioneurotic edema usually appears without any warning, exposure to cold, however, being a frequent cause. Puberty, the climacteric and fright or other strong emotion may cause the condition; hysteria also. The hands are usually affected, but the face, lips, tongue and genitals and feet may suffer. Malaria has caused the phenomena to appear with regularity. Usually more or less gastrointestinal or urinary disorder precedes or accompanies an attack. Analyze the urine; find deficiency of urea. Diarrhea often follows an attack. It is quite probable that this patient will suffer at the menstrual periods; on the other hand, the symptoms may cease as soon as the flow is established.

The edema reaches its maximum in from a few minutes to two hours, may last an hour or two days and recedes as rapidly as it comes. "The swelling is tense, sharply defined, and *does not pit on pressure*" (Church-Peterson "Nervous and Mental Diseases"). The color is white or pink and there are no purpuric or ecchymotic blotches. Hysteria presents a bluish swelling and globus hystericus is often complained of at the same time. Several swellings may appear at once. Tension,

Salicyl, pot. iod., brom., chlor., arsenic, iron, lead, mercury, turpentine possibly caffeine, are excreted with bile.—P. & B.

burning and stiffness of the part affected are complained of and if the skin is scratched roughly urticarial wheals may appear. Sweating is often profuse during decline of edema. If the tongue and larynx are involved the condition may become serious, life, even, being endangered. When chilling of the skin causes the edema it is usual for the seasons to affect the condition, i. e., sudden exposure in summer is more apt to produce an attack.

The disease appears in those of a neurotic tendency, may be hereditary and does not itself directly affect the health. Females suffer more often than males.

Treatment.—Build up the patient's health. Nuclein, the three arsenates, lecithin and bitter tonics with digestants will suggest themselves. Glonoin (or atropine) *when attack threatens*, with heat to parts, may abort it. Cactin, one, and the dosimetric trinity, two, morning, noon and night, will also prove advantageous. Try cypripedin and aletrin (two each) every three hours in this instance and carefully examine vagina and pelvic organs.—ED.

QUERY 5116.—"Menorrhagia." Female, aged 44, family history negative, menstruated at twelve, always excessive, intervals three weeks. Gave birth to two children, no miscarriages. At forty developed the menopause, interval of three months, no menstruation. At the end of three months a severe hemorrhage lasting for two weeks, of intermittent character, and so continues up to the present time. No odor, vulva and vagina normal, womb slightly retroflexed, no excoriations of the os or ulcers, size of organ normal, patient slightly anemic, no indication of malignant trouble. Always bleeds freely from abrasions of skin.

E. L. H., Illinois.

I am always suspicious of hemorrhages at the menopause. Sometimes they depend on an intrauterine tumor, not necessarily

Stadelmann showed that water by mouth or rectum did not increase flow of bile at all; experience seems contradictory.

malignant. The remedy I would suggest, however, is hydrastinine. Give gr. 1-12 three times a day. Meanwhile, keep her bowels soluble with a morning saline, and administer calcium lactophosphate, ten grains a day, continuing this for one month or over the period of two menstruations. If the hemorrhages occur once in three months only, as I infer, begin this treatment two weeks before the next period, and a day before it is expected send her to bed to remain there for a week.—ED.

QUERY 5117.—“Ascites.” I have a case of ascites, and I want you to give me your best treatment in such cases.

I. A. H., North Carolina.

In regard to all forms of dropsy I cling firmly to Niemeyer's dictum that more benefit will accrue in the long run, from sustaining the patient's strength and improving his blood by judicious tonics and dieting, than by any attempt at removing the effusion directly. In removing it you remove valuable nutritive elements from the body, and as the back pressure against the blood-vessels is removed, the effusion recurs more quickly and drains the patient still further. Nevertheless, it has been found in some cases of cirrhotic ascites that a permanent cure has followed several tappings, so that the above opinion must be modified somewhat. Our advice is that you put your patient on the most rigid dry diet possible, restricting him to one pint of fluid each twenty-four hours, that you give him two granules of apocynin every two hours while awake, increasing the dose until it begins to act upon the bowels, then lessening it somewhat so as to keep just inside the toxic point. If he is anemic, add iron, iodide or phosphate. If the distention is so great as to interfere with respiration, tap and withdraw about a pint of fluid, which will give

Raising blood pressure in the splanchnic area causes very considerable congestion of the brain and lungs.—Dixon, *Lancet*.

as much relief as the withdrawal of a gallon or more. In cases where the patient has been tapped many times with constant recurrence, I have used Southeby's tubes for continuous drainage of the peritoneum with excellent results in the way of added comfort.—ED.

QUERY 5118.—“Sterility.” Woman, 24, health good, married seven years, never pregnant, genitals normal except slight leucorrhæal discharge from womb (endometritis); the os very small, size of knitting needle; dilated repeatedly and applied euarol, followed with iodine tampons; injections of vaginal antiseptic powder every day; case improved; stopped treatment, leucorrhæa set up the same as before, in fact did not stop entirely during treatment, but almost so. There is no soreness at present. All parts seem to be in good condition except the discharge. Do you think the pin-head os has been the cause of sterility? Do you think it necessary to curet?

H., Ohio.

If the case be gonorrhæal she should have calcium sulphide and arsenic sulphide to full saturation, maintained two full weeks. Galvanism, the negative electrode in the uterus, destroys invading microorganisms and stimulates development if infantile. Sexual appetite and capacity follow health and happiness so surely that special stimulants are superfluous. Sanguinarine, gr. 1-22, four times a day, may be useful in determining blood and nervous force to the uterus.

You might dilate the cervical canal with benefit, but do not curet without good reason. Have the discharge examined for gonococci. Then look up the position of uterus: If the os points up towards the pubes conception is improbable. Give hot douches; use a recurrent irrigator and then plug vagina with gauze buttered with vaselin and sprinkled with an antiseptic powder. Twice a week for two weeks *swab* the uterus with euarol.—ED.

Adrenalin acts on peripheral nerve ends; ergot on certain nerve centers, intensely congesting splanchnic and limb vessels.—Dixon.